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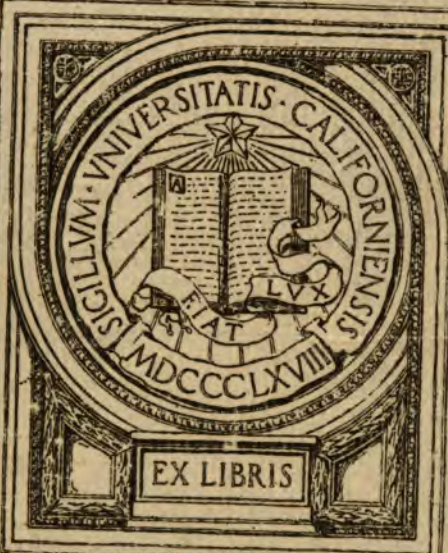
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Housing Report
—TO—
The Newark City Plan Commission



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Newark has been constantly adding to the number and area of its parks for the last 15 years. This shows some of the fine trees in Weequahic Park.



There are many homes like this in the city, miles of streets being lined with them at both the north end and in the southwest.

HOUSING REPORT
TO
THE CITY PLAN COMMISSION
OF NEWARK, N. J.

BY
E. P. GOODRICH AND GEORGE B. FORD

REPORT MADE FOR MR. GOODRICH AND MR. FORD BY
DR. JAMES FORD, OF HARVARD UNIVERSITY

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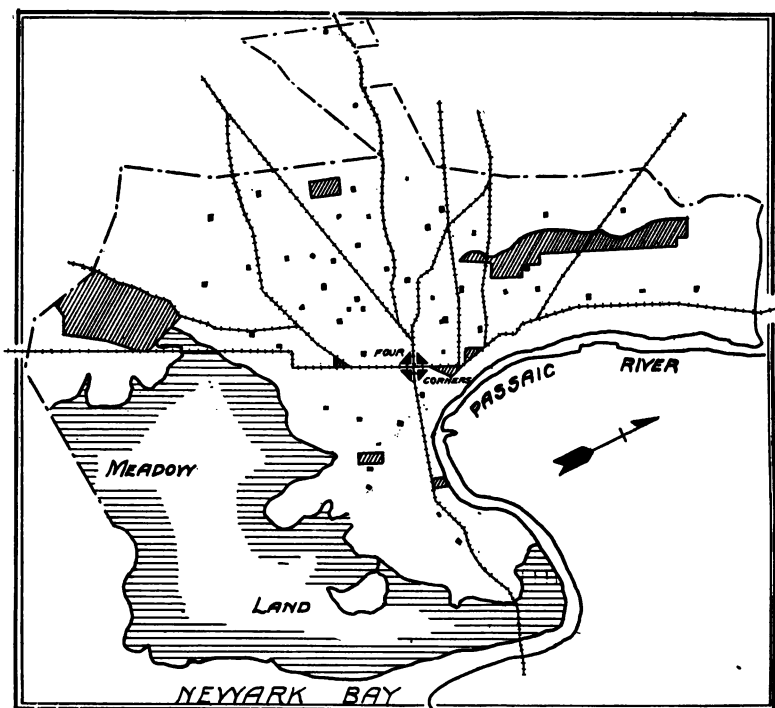
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Shows how large a part of the city's area is unoccupied swamp or meadow; how numerous and well scattered are the Parks (indicated by diagonal ruling); the distribution of school houses (shown by black squares), and the main line of the trolley system. This last is to be greatly improved as soon as extensions planned can be carried out.

INTRODUCTION

The People and Their Homes.

Newark is a city of 347,469 inhabitants (1910). It is primarily an industrial city. The thirteenth U. S. Census shows Newark to be the 14th city in population and the 11th city in value of manufactured products in the Union. Its chief industries are leather, malt liquors, jewelry, machinery, hats, chemicals, varnishes and stoves. It is therefore a city with a large skilled working class—mainly the children of German and English immigrants—stable, industrious, conservative. The foreign-born, whose intelligence and standards of living are usually lower, constitute only thirty per cent. of the population. The permanent, thrifty, home-owning element of the population—essential to the creation of prosperous industry and stable, efficient government and social institutions—is peculiarly large, of which fact a membership of 65,000 in local building and loan associations, (representing considerably over half of the families of the city), is an eloquent witness.

The homes of Newark are mostly built upon the hills, which are of easy grade. The residence streets of the well-to-do of a generation ago are broad, with old stately trees, broad lawns and large detached brick dwellings of marked dignity. The capitalists of today have built attractive homes of English or Colonial types, set well back from the street and from neighboring dwellings and well maintained.

The homes of skilled workmen, clerks, and small shopkeepers and one-family, two-family and three-family houses are usually built of wood and are in general well kept and wholesome. Back yards are deep, leaving a large open space in the interior of each block for the penetration of air and sunshine, with fruit trees, vines and flowers, and the open spaces give a suburban character even to the homes near the heart of the city.

The laboring class, chiefly the foreign-born, live largely in detached two and three-family houses. The few streets of large tenement houses are occupied almost solely by this part of the population. These, as they acquire wealth, build new tenement or suburban homes.

The streets of the city are well paved and drained. The Shade Tree Commission, which has achieved a national reputa-

tion for its campaign of public education in care of trees, cares for 60,000 trees and adds several thousand new trees each year to beautify the streets of the city. Two attractive county parks are maintained within the city, accessible to residence districts of all classes. Minor parks and playgrounds, having a total area with the above of 3,833 acres, are maintained at frequent intervals, rendering a natural play place readily available to adults and children of the residence districts.

The Conditions.

In modern cities of the size of Newark a housing problem is invariably present. Housing conditions vary very decidedly in different quarters of such cities; there are unsanitary buildings that are relics of the building fashions of previous generations; there are probably unsanitary buildings of modern construction as well. Each older American city has its blighted districts and its growing districts. A large city usually has several tenement districts, each with an individuality of its own; there are ordinarily one or more quarters containing the luxurious homes and large estates of the more prosperous citizens, and many isolated districts of one or two-family houses, of tenements converted from single family residences, and of high block dwellings.

Scope of the Investigation.

Newark has had no comprehensive housing investigation made during the past decade, hence it was necessary to devote a large percentage of the five weeks' time allotted for preparation of this report to a careful examination of the existing housing conditions in old and new quarters of the city. The records of the State Tenement House Department and of local health and building departments proved to be of considerable value. But as they were not adequately up-to-date and thorough, it proved necessary to make an intensive house-to-house investigation of selected districts in various parts of the city. A study of this sort had been contemplated by the Housing Committee of the Public Welfare Committee of Essex County. Hence in co-operation with that body the writer undertook to supervise a house-to-house canvass of five selected city blocks. For this purpose the services of Mr. Herman Copeland were secured through the courtesy of Mr. Carol Aronovici, Director of the Bureau of Social Research of Providence, R. I., and also the services of Miss Udetta D. Brown, a graduate student in the New York School of Philanthropy, through the kindness of Miss Headley, Director of the Tenement House Committee of the

Charity Organization Society of New York. Miss Brown's report, which treats in a sympathetic but careful manner the more intimate human problems of two Italian blocks, has been separately compiled, and a copy is submitted with this report.

Districts Intensively Studied.

The districts chosen were as follows: First, the block bounded by Springfield Avenue and Shipman, Augusta and Arlington Streets, including Landers Alley. This block contained 322 persons, of whom 77, chiefly Germans, lived on Springfield Avenue; 76 of various nationalities lived on Arlington Street; 65, largely Negroes but including four other nationalities, lived on Augusta Street; 82, including seven nationalities, lived on Shipman Street; and 22, chiefly Germans, lived on Landers Alley. This district was chosen to offer an extreme example of bad housing conditions in old buildings.

The second district, bounded by Prince Street, Waverly Avenue, Broome and Spruce Streets, was chosen because it contained a large number of tenement houses built under the present Tenement House Act of New Jersey. The block contains, however, a large number of three-story frame tenements, mostly of old construction, and of converted houses. The block contained in all 1,285 persons, of whom 792 lived on Prince Street and 252 on Broome Street, leaving only 58 on Waverly Avenue and 183 on Spruce. The large majority of families were Jewish (226 out of 248); there were, however, 11 colored families, 3 German, 3 Polish, 1 Hungarian, and 4 unrecorded (probably Jewish). Only 48 of the 248 families took lodgers, so the problem of room overcrowding in this district is very largely a problem of crowding large families in small apartments. Sanitary appliances in this district were very largely of modern types; there is some lot congestion, both because new buildings cover an excessive percentage of the land and because of older rear buildings on several lots.

The third block chosen is in the Island district, bounded by Joseph, Esther, Albert Streets and Euclid Avenue. There are houses on only two of these four streets, Joseph and Esther. One of these is a six-family house, one a three-family house, and the rest are all two-story buildings placed about three feet six inches apart on the average, each with four or more rooms. Thirteen of these two-story buildings are occupied by one family only; nine are occupied by two families; twelve families own their own homes. There were 24 families of Poles, 8 of Slavs, 1 German, 1 English, and 4 Irish; the total number of persons in the block was 206. Twelve of the apartments in a three-story

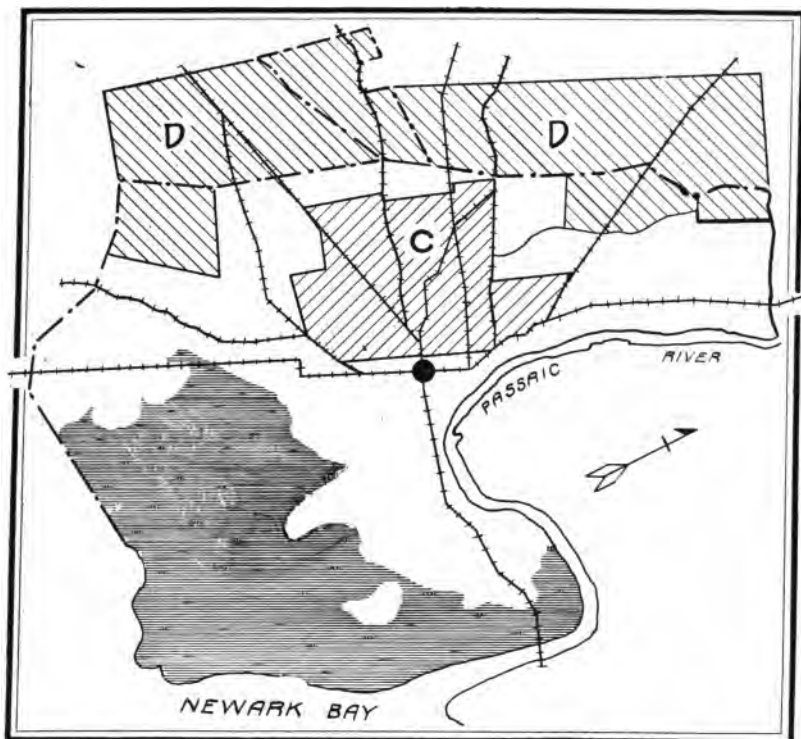
multiple frame tenement house in the next block on Albert Street, were studied. This building contains 36 apartments, each with two dark rooms, and served by piazza toilets, which were in very bad repair. The twelve families visited in this building were Polish.

A part of a large block on Eighth Avenue was studied. All of the apartments on the south side of Eighth Avenue between Nesbitt and Sheffield Streets were examined. This block contained frame houses for one or two families, frame tenements and brick tenements, 80% of the houses containing three or more families. In all there were 101 apartments visited, chiefly of Italians. In the same block Nassau Place was examined, which contains a two-story frame multiple building. The tenants are chiefly Negroes, but there were Italians in a few of the apartments. Nassau Place lacks dark and gloomy rooms and is provided with in-door toilets, thus differing from the conditions of the neighboring street, Eighth Avenue. But it suffers from the evils almost invariably evident in alley communities—bad repair, uncleanness, and perhaps also immorality.

The last district lies in the Silver Lake neighborhood, bounded by North Eighth Street, Delavan Avenue, North Ninth Street, and Chester Avenue. The block contains only 14 houses and was chosen in order to ascertain the problems of newly built communities. Twelve of these houses are occupied by owners, mostly Italians. The district suffers chiefly from municipal neglect, especially in disposal of refuse. Even in this outlying quarter there were three instances of room-overcrowding.

Supplementary Sources.

This intensive study of housing conditions in selected quarters was supplemented by inspection of houses bad and good in various quarters of the city in company with the sanitary inspectors of the Board of Health. Some aid was obtained also from use of the records of the Anti-Tuberculosis Association and other private bodies. Acknowledgment should be made to the Board of Tenement House Supervision, the Newark Department of Health, and to the Newark Superintendent of Buildings for free access to their records and for their ready assistance in all phases of this investigation.



C indicates congested area close to the business and traffic centre (the black spot).

D D is the large region to the northwest, west and southwest, lying partly in and partly outside the city limits, available for homes of moderate cost. It is nearly all high and well drained, and traversed, as shown by trolley lines. Only a very small part of this large suburban area is as yet built up.

CHAPTER I.

THE PROBLEM OF HOUSING IN NEWARK

SECTION I—HOUSING AND PUBLIC WELFARE.

Definition.

A housing problem may be said to exist wherever any portion of a population dwells under conditions dangerous to health, safety or morality. The problem is present to some degree in every American city. It is usually occasioned primarily by the lack of guidance in urban growth, by poor planning of buildings, faulty construction and defective sanitation; it is aggravated by the greed of some landlords, the carelessness of some tenants and ignorance of the laws of hygiene on the part of both. The result of bad housing is ill health, both physical and moral, and thereby industrial inefficiency, unemployment, and a long chain of preventable social maladies, which are very costly to the community, and which place a heavy handicap upon individual and social achievement.

Housing and Public Health.

Man's dwelling exerts a marked influence upon his life and character. From one-third to one-half his time and much more than half of the time of women and children is spent in the home. Bad housing conditions affect health insidiously by slowly undermining the vitality and thus rendering the individual susceptible to disease. But bad housing conditions also constitute an environment favorable to the life and multiplication of the bacilli of a number of diseases. For example, the germ of pulmonary tuberculosis can live for years in a dark, damp, ill-ventilated and ill-kept environment, in other words, in basement dwellings, in dark halls and dark chambers. The bacillus of typhoid fever may not only be conveyed through the water or milk supply of a city, but it may also be carried by flies and vermin from the filth in which it was deposited to the food of urban households. Thus a city with an unsanitary water supply or with manure pits and garbage pails uncovered in which the fly may breed and privies in which the bacillus may be picked up is an environment favorable to the spread of typhoid fever. The tenement house, with its halls, stairs and water-closets shared by many families, becomes a sort of clearing-house of the contagious diseases—scarlet

fever, measles, etc. The common water-closet may become the source of spread of venereal disease. The indiscriminate overcrowding of sleeping rooms by both sexes may result in the spread of the same diseases and also in an undermining of the health of adolescents and adults through neurasthenia and other diseases which over-stimulation of sexual instinct and its unsatisfactory fulfillment may occasion.

Housing and Public Safety.

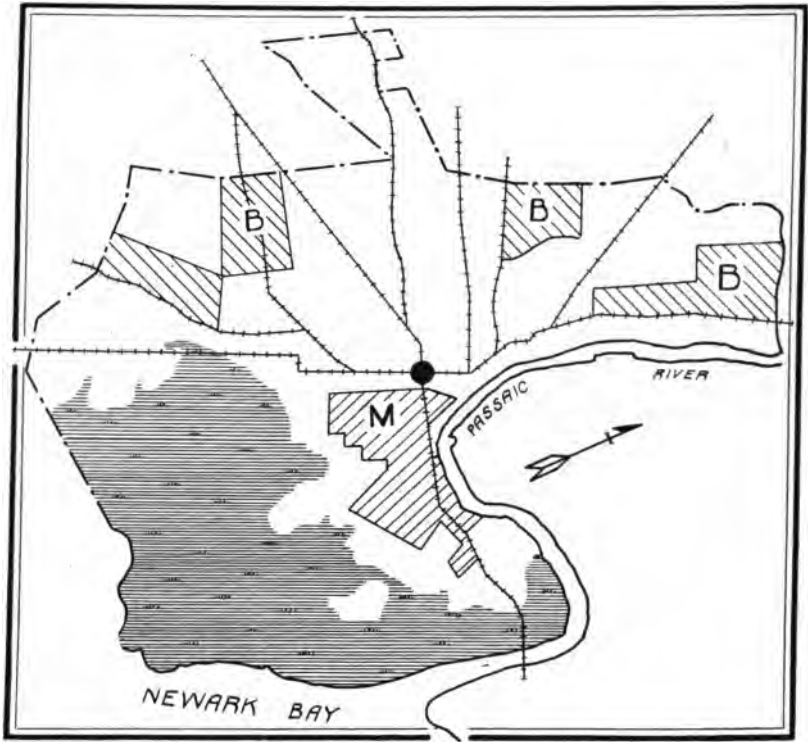
The safety of an urban population is in many ways affected by housing conditions. The overcrowding of lots with buildings erected of combustible material creates a serious conflagration risk, especially where buildings are of frame exterior or are used both as stores and dwellings, as is common in our large American cities. Fire escapes reduce the danger to tenants from fire, but improperly constructed fire escapes constitute a new risk from accident. The presence of stores, bakeries and workshops in non-fireproof tenement houses, the storage of combustible materials,—rags, paints, etc., the encumbrance of fire-escapes, the proximity of railroads and manufacture of explosives, affect in varying degree the safety of the tenant.

Housing and Morality.

Intimately dependent upon the housing conditions is the morality of the population. The crowding of rooms with three or more members of a family, children of both sexes sleeping together or with parents, and the presence of lodgers within the tenement make impossible the maintenance of high standards of personal decency. Premature knowledge of sex functions by the children is the inevitable result of overcrowding and often morbid stimulation of sex instincts, sex-perversion and vice originate in this room congestion. Yet indiscriminate crowding of sleeping rooms prevails very widely within the immigrant population groups of our cities. The dark halls and common toilets add to the menace for the growing children of the tenements, and frequently the presence of commercialized vice within residence quarters familiarizes the child with the worst element of our civilization before the child's mind is far enough developed to resist the superficial allurements.

Housing and Efficiency.

A general reduction of vitality, or disease of any sort acquired through residence under conditions above described results necessarily in reduction of industrial efficiency. Disease



**M marks Newark's region of homes of people of moderate incomes; while
B B B mark regions of expensive and high grade residences.**

causes absence from work, which means reduced earnings, increased expenditures and, perhaps, also a long period of unemployment before new work is found. In extreme examples a state of mind which has been termed the "slum disease" is apparent in which individuals have become chronically indifferent and careless because they have found themselves unable to cope effectively with an always depressing environment; the serious effect of this attitude of mind upon industrial output is obvious.

Housing and Democracy.

It is impossible to create a high civilization in a democracy where a large portion of the population must exert its entire life in struggling against destructive environmental conditions. The body is the tool of both mind and soul. A healthy body is the first requisite of the moral life. An individual can contribute little to the promotion of general well-being until rid of the weakness or pain, which ill health causes. An essential prerequisite of efficient democracy is a healthful home life with elimination of all the destructive elements now present in our slums and with the positive presence of the constructive elements, sanitation, safety, ventilation, sunlight, space, privacy and beauty.

"The Housing Problems of Newark—Contrasted with Other Cities.

A careful study of the housing conditions in American cities shows that many of the housing problems which are serious in other urban communities scarcely exist at all in Newark. For example, Newark, unlike New York and Boston, is not cursed with extensive congestion of buildings upon lots. There is scarcely a block in the city in which rooms having direct exposure to the yard or street cannot obtain adequate light and air. The problem of the narrow street bordered by high tenement houses, which is prevalent in Boston and in many French and Italian cities, is almost absent in Newark. The problem of public alleys, which afflicts Milwaukee and many middle western cities, is not important in Newark, though a few alleys are to be found in the older parts of the city. The problem of ill-ventilated and ill-lighted alley houses, built with but a single exposure,—a problem which harasses the cities of Philadelphia and Montreal—is not present in Newark. Privy vaults and surface drainage, which for years have plagued the health and the senses of sight and smell in the city of Baltimore, have ceased to exist to any very

serious extent in the heart of Newark, though present in several districts. The use of one-room apartments by whole families, which is widespread in Berlin and London, and is spreading in Chicago and other American cities, is apparently not widely prevalent in Newark.

SECTION II—SPECIFIC HOUSING PROBLEMS.

Dark Rooms, Dark Halls and Tuberculosis.

Though fortunate in the absence of the problems already mentioned, Newark suffers today from many unhealthful conditions in residence quarters. Of these conditions the prevalence of dark rooms is particularly urgent. Previous to the enactment of the Tenement House Act many large tenement houses and frame dwellings were built with windowless rooms; halls were often constructed without windows; frame dwellings were built close to the lot line, so that even though windows were cut in the side walls, the rooms were not adequately lighted or ventilated. Not only tenement houses but one and two-family houses were of this construction, and are to be found in all the older sections of the city. In visiting at random about forty addresses at which there have been two or more cases of tuberculosis * since the year 1910, I found dark or very gloomy rooms in a majority of cases. A more careful canvass should be made of all such houses, many of which are not tenement houses, and therefore not covered by the records of the Tenement House Department. Such investigation would reveal to every thinking citizen the intimate relation of housing conditions and disease.

The following examples may be mentioned: At No. — Seventh Avenue, in which two rooms have windows upon a narrow shaft, there were two cases of tuberculosis in the year 1911. At No. — Cutler Street, which also has a record of two cases of tuberculosis, one room in each two-room suite receives only the meagre light from the four-story airshaft. At No. — Bowery Street, there are two dark rooms to each interior apartment. At No. — Prince Street (See photograph 11589), will be found an old tenement of the "railroad" type, five rooms deep with but one small shaft for lighting two of the interior rooms, the third

*There is no official record of the heredity or the occupations of these cases, hence no allowance is here made for hereditary predisposition to tuberculosis nor for the industrial causes of the disease. The records of the Anti-Tuberculosis Association of Newark for the third year (1911) show that of 697 living cases dealt with, 305 had some tuberculosis in the family; 310 did not, while 82 were uncertain. Only 120 lived in houses where a death from tuberculosis has occurred within the past nine years. There may, however, have been living cases in these houses within that period; 172 lived in one and two-family houses, 293 in tenements, 42 in furnished rooms, 19 in lodging houses, 2 in boarding houses and 51 lived out of town or were unaccounted for.



Flash-light photograph of a dark room on ——— Street. This building is in very bad repair and contains dark rooms on every floor. Tenants complain that portions of the rooms are unsafe and that accidents have already occurred from rotten flooring. The occupancy of rooms of this character must be prevented. It is improbable that any measures could make this building safe and healthful. In many cities buildings of this character would be condemned or vacated by public authorities.



Cellar dwelling of three rooms on ——— Street inhabited by Poles. When inspected in September this tenement was overcrowded and had defective drainage. Cellar dwellings are prejudicial to health of occupants and their occupancy should be prevented in old buildings as well as new.

being dark. This house has a record at the Board of Health office of three recent cases of tuberculosis. At No. — Madison Street there are two dark rooms on every floor. In almost every case these same buildings and others of their kind have dark halls as well as dark rooms. An extreme example of both conditions will be found at No. — Eighth Avenue, in which on the second floor of an old converted house was found a negro family of three, cooking and sleeping in one dark room. The house has had a record of three cases of tuberculosis within the past three years, to which may be added a fourth case in the room just described.*

A comparison of the residential map with the tuberculosis map of Newark will show that deaths from tuberculosis, excluding lodging house districts, have been especially numerous where population is most congested in high contiguous tenement houses, as the Prince** and Garside Street districts, and that such deaths are strikingly infrequent in those crowded sections where open building (characterized by spaces between houses on adjoining lots for penetration of light and air) is the rule—as for example the district lying between Branch Brook Park and Fairmount Cemetery. The Augusta Street district, though not generally characterized by high building nor exceptional crowding, is largely peopled by the negro race, which is especially susceptible to consumption. Poverty, undernourishment, overwork and immorality increase susceptibility. The general disrepair and poor sanitation of houses also render thorough disinfection, even if attempted, impossible. The presence of dark rooms in the block bounded by Shipman, Augusta, and Arlington Streets and Springfield Avenue creates a perpetual menace for all tenants.

The following tables show for sample blocks the prevalence of dark or gloomy rooms.***

Basement Dwellings.

Basement and cellar dwellings are still moderately frequent in Newark. In a large percentage of cases the underground rooms are used only for cooking or general living purposes, the

*The family has been forced by the Board of Health to move from this tenement.

**The Jewish district is crowded with tenements and a large population. There are also many dark rooms (see table for a sample block). The tuberculosis death rate is less than might be expected under housing conditions of this character because the Jews are of a race which shows marked immunity from consumption (See Dr. M. Fischbergin, "Tuberculosis Among the Jews," pp. 415-428 of Vol. III, Sec. V. of the 6th International Congress on Tuberculosis, Washington, D. C.)

***Most of these dark rooms have windows to the "outer air" (narrow shafts, courts, or passage ways) but the closeness and height of adjacent buildings shut out light from the rooms.

STREET	DARK HALLS	GLOOMY HALLS	DARK ROOMS	WINDOWS OPENING INTO			GLOOMY ROOMS	WINDOWS OPENING INTO		
				ROOMS	HALLS	OUTSIDE AIR		ROOMS	HALLS	OUTSIDE AIR
PRINCE	8	24	23			23	139			139
WAVERLY	2	1	5			5	6	1		5
BROOME		14	22	3		19	35			35
SPRUCE	1	6	12	1		11	12	3		9
TOTALS	11	48	62	4		58	192	4		188
AUGUSTA		1					1			1
SHIPMAN		2	12	1	8	3	4	2		2
SPRINGFIELD		8	8	2	3	3	11	2		9
ARLINGTON	3	9	3	1		2	8	1		7
LANDER'S ALLEY		1					2			2
TOTALS	3	21	23	4	11	8	26	5		21
ALBERT		2	72	UNKNOWN						
JOSEPH		4					8			8
ESTHER			3			3	4			4
TOTALS		4	3			3	12			12
GRAND TOTAL	14	75	160	8	11	69	230	9		221

bedrooms being located on the floors above. But even in these cases health conditions are undesirable, especially for the women, who must spend the greater part of their day in rooms that are damp and often sunless. For example, at No. — Lafayette Street, and at No. — Bowery Street, may be found family living-rooms in the cellar. At numbers — and — Oxford Street are two three-room cellar tenements, in which families sleep as well as cook. These Oxford Street tenements (see photograph No. 26) have been ordered vacated under Section 779 of the Sanitary Code. The basement dwelling is much more widespread than the cellar dwelling, and constitutes a less serious problem ordinarily, because a larger percentage of the rooms in question lies above street or yard level. But in those portions of the city where underground water rises near the surface, at certain seasons of the year, or where defective yard drainage and rain leaders permit the water to run into the lower floor, health conditions may become serious.

Disposal of Body Wastes.

Newark has met the problem of sanitation of dwellings better than most large American cities. The sewage and water systems are general. The privy vault and cesspool, the well and yard hydrant have all been largely eliminated. There are still, however, a few privy vaults in violation of Section 801 of the Sanitary Code in almost every residence ward of the city. They will be found, for example, at No. — Boyden Street, at No. — Bowery Street, at No. — Eighth Avenue, and at Nos. — Market Street, in the older wards, and will be found throughout the outskirts of the city. There is a school-sink serving houses Nos. — Oxford Street. The Board of Health is working for the elimination of the vaults designated above, as they exist on sewered streets. Their existence in each instance is unnecessary.

A more serious problem is the existence of streets not far from the city center which possess no sewers. The families in such sections must rely upon either the privy vault or the cesspool for the disposal of waste. This means that the soil in these parts of the city is still becoming polluted, and that the homes of these quarters are harassed by noxious odors. There is no excuse for a condition of this sort in a city of the size of Newark. The presence of privies on Lexington Street, between Bowery and Passaic, has been explained by Health Inspectors to be due to the absence of a proper sewer on that part of the street. A Lister Avenue property in the Island district (see photograph No. 35), is served by 13 privies, though close to a sewer. The Island district will, however, be served shortly by a

county sewer. On the border of the Silver Lake district, in Belleville, there is surface drainage and an open brook sewer flows on the city line (photograph No. 19), creating in a portion of the outskirts that might be made peculiarly desirable as a residence quarter a plague spot of serious character. In general, however, Newark has far surpassed her neighbors (Elizabeth, Jersey City, Philadelphia) in the extension of her sewerage system and in the elimination of the privy vaults.

In framing the legislation which forced the elimination of the privy vault, the yard water-closet (example photograph No. 42) was permitted as substitute. Although the yard water closet is not allowed for new tenement houses, it is still permitted on the grounds of new one and two-family houses, and is widely prevalent in the older residence and tenement sections. The yard water-closet is a vast improvement upon the privy vault, which it replaced, but in this climate it cannot be maintained secure from freezing in the winter time, in spite of the anti-freezing provisions of the Sanitary Code (Section 882). Such water-closets, despite the watchfulness of the Health Board, will sometimes remain frozen for weeks, and thus temporarily afford a problem as urgent as that of the privy vault. Furthermore, the yard water-closet constitutes a health menace in periods of inclement weather, when its use by day or night demands exposure in passing to and from the house. If not used, the collection and carriage of night accumulation of liquid and solid excreta to the yard toilet is often carelessly done. Such waste spilled or unemptied adds to the unpleasantness and and unhealthfulness of tenement living.

The lack of privacy in the use of yard closets may constitute a menace to morality. Of 61 yard closets in the Prince, Augusta and Joseph Street blocks, 33 had doors that would not lock. Yard closets may also be used by the passing public making possible the transmission of venereal diseases (the bacilli of both gonorrhea and syphilis can live for a few hours in a moist place outside of the human body). An innocent user of a toilet in which these germs are deposited may become infected through any slight abrasion of the skin which may come in contact with such germs.

Some northern cities, Boston and Cambridge for example, have forbidden the substitution of the yard water closet for the privy vault. This provision is attended with serious difficulties in that it is almost impossible to put toilets in certain houses, constructed previous to the law, and yet render them accessible to all tenants, unless such toilets be allowed in the cellar or in the dark hallway. These latter are not much more desirable than

STREET	TOILET NOT WITHIN APARTMENT			INSTANCES OF TOILETS USED BY ONE OR MORE FAMILIES MORE THAN ONE FAM. TWO FAM. THREE FAM.		INSTANCES WHERE NO LOCK FOR YARD TOILETS
	IN YARD	IN HALL	IN CELLAR	ONE FAM.	MORE THAN ONE FAM.	
WAVERLY	1			9		
BROOME	8			48	1	6
SPRUCE	2			32	1	
PRINCE	6	3		145	3	2
TOTALS FOR BLOCK	17	3		234	5	8
AUGUSTA	1			13		1
SHIPMAN	9		3	55	8	4
SPRINGFIELD	2	5		77		2
ARLINGTON	6	3		65	2	4
LANDERS ALLEY	2			5		2
TOTALS FOR BLOCK	20	8	3	215	10	13
JOSEPH	10			11		8
ESTHER	14			7		4
TOTALS	24			18		12
GRAND TOTALS	61	11	3	467	21	33

the yard toilet. It should, however, be required that no new dwelling, even a one or two-family house, be erected without an interior toilet.

Water Supply.

In general throughout Newark houses have been connected with the municipal water supply. There are very few surface wells in use, and apparently the Board of Health exerts constant supervision over the few that exist. In several parts of the city where municipal water is available, water has not been piped into all the houses, but some families are required to use yard hydrants. Such hydrants will be found, for example, on Lister Avenue, on Passaic Avenue near the corner of Ferry Street, on Chapel Street, and on Augusta Street, corner of Landers Alley (photograph No. 43). In old tenement houses the water supply is frequently placed in the hall and shared by several families. Ten families on one side of Eighth Avenue, between Nesbitt and Sheffield Streets, are thus forced to procure their water for washing, bathing and cooking from the hall. Cleanliness is likely to be sacrificed where water is not easily accessible.

Stables.

Within a city the presence of waste organic matter is always liable to become a menace to health. Every city is thus confronted with the problem of regulating the keeping of animals within the urban limits. Tenement houses in Newark quite frequently hide stables, situated in the rear of the block, close to the houses and constituting a nuisance. For example, at Nos. —, — and — Eighth Avenue there are old stables behind tenement houses, two of which are unclean and beyond repair. All three of these are within the fire limits and are maintained in contravention of Section 140 of the tenement house act which forbids stables on the lot with a tenement house within the fire limits. The local building code (Section 80) forbids the erection of new stables within forty feet of any dwelling. New stables for horses, if fire-proofed, can, however, be placed within twenty feet of a dwelling, and old stables are permitted to remain on lots with one and two-family dwellings. The Sanitary Code, Sections 834 and 835 (with amendment of May 4th, 1909), requires that manure pits shall be satisfactorily constructed and covered. The provisions of the law as they stand are not well enforced. Even when stables are well maintained there is always a temporary accumulation of filth within them, and the manure pit is seldom so well covered as to prevent the access of flies. For example, the stable at No. — Prince Street lies within 35 feet of the house

on the same lot and within 20 feet of a 14-family tenement house, containing 87 persons, built on the adjoining lot line. It is well concreted, but the manure pit, which stands between it and the tenement house, harbored hundreds of young flies on the day when visited, and the odor is stated to be a continuous nuisance throughout the summer. This condition cannot be remedied without change of the law. At No. — Oxford Street, which is within a residence section, there are stabled about thirty cows; two other cow stables are to be found within the same sanitary district. Goats are kept within the Island and Silver Lake districts, and poultry is kept quite generally in tenement and residential quarters. The Board of Health does not permit animals or fowl to be kept within the dwellings, but a higher standard in the granting of permits would undoubtedly improve the health and amenity of living within thickly populated residence sections. Dwellings maintained over stables are still to be found in Newark, though banished from many cities. At numbers — and — Landers Alley, for example, there are apartments over stables, the occupants drawing water from the stable faucet, using toilets in neighboring buildings and dwelling in disgusting proximity to the uncovered heaps of manure (mingled in one case with garbage).

Disposal of Household Refuse and Garbage.

It is invariably difficult to provide for the disposal of household refuse in cities. The problems involved in making contracts with private parties for refuse disposal are serious. The Board of Trade shows in its report of 1910 that the contract of that year was not well enforced. In the crowded tenement sections collections are stated by tenants to be too infrequent in summer time. Collections are apparently not made at certain quarters (Nassau Place, Landers Alley and parts of the Island and Silver Lake districts where garbage is dumped in vacant lots). Overflowing pails, and especially a lack of covers for garbage receptacles, are general throughout Newark. In the Eighth Avenue block only 7 out of 27 families (see accompanying table) had metal pails for household swill, and not one of these was found covered. The lack of covers to the garbage receptacles of Nos. — Prince Street makes the neighboring basement apartments almost unlivable. Yet frequent complaints of the tenants have resulted in no action. It is entirely possible for cities to enforce an ordinance requiring the covering of receptacles for garbage. New York City has amply demonstrated this fact during the past summer. Tenants and owners have responded to the notices served by policemen and health inspectors,

8TH AVENUE BETWEEN NESBITT AND SHEFFIELD				
TOILETS				
APT.	PORCH	YARD	HALL	TOTAL
1		1		2
3		5		8
2	1	6		9
7	1	7		15
3	7	8		18
7	2	13		22
4	3	1		8
1	2	2	1	6
2	2	2		6
	3			3
	1	1		2
1				1
1				1
32	22	46	1	101

8TH. AVENUE				
LOCATION AND SIZE OF HOUSE	BUILDINGS WITH GARBAGE RECEPTACLES			
	METAL	WOOD	MISC.	TOTAL
FRONT 1 FAMILY		1		1
FRONT 2 FAMILY		2		2
TENEMENT	6	5	8	18
TOTAL	6	8	8	22
FRONT				
REAR 1 FAMILY		1		1
REAR 2 FAMILY	1		1	2
TENEMENT			2	2
TOTAL REAR	1	1	3	5
GRAND TOTAL	7	9	11	27

and where necessary have even provided padlock and chain to hold the covers on pails. The city of Minneapolis, which burns its refuse, requires that all garbage be drained and wrapped in newspapers before being placed for the collector, thus amply protecting organic refuse from access of flies and egress of obnoxious odor.

The practice of filling land with garbage, long since outgrown in most leading American cities, still survives (under special permit, Sanitary Code, Section 814) in Newark, especially in the Silver Lake district. Photographs Nos. 3, 16, 17, 29 show garbage dumps and a vacant 25' lot between two wretched houses being filled with the nauseating refuse of a neighboring township. In each of several visits to this quarter I have seen groups of children standing ankle deep in these dumps pawing over the filth in search for articles of value. Democracy can not afford to train its next generation of voters by means of an environment of this sort.

Repair of Dwellings and Cleanliness.

Poor maintenance of buildings may take the form of bad repair of houses. If buildings are poorly constructed or used by tenants many in number or rough in character the building is soon badly worn. Absentee landlords are not so frequently responsible for prolonged disrepair as ignorant immigrant owners of low standards, or unthinking or unscrupulous trustees and agents of the estates of prominent local families. The foreign quarters are owned by foreigners largely, but the Augusta and Shipman Street properties (photographs Nos. 7, 25, 43) and the houses of Lister Avenue (see photographs Nos. 4, 34, 35) are owned largely by local citizens or corporations that have not been made aware of their responsibilities. A recent accident in one of these buildings, not yet rendered safe, is indicative of the necessity of municipal intervention to require thorough repair or else destruction of dangerous dwellings.

The Habits of Tenants.

The conditions of house and yard maintenance, already described, are with few exceptions matters for which the owner is directly responsible. But in every city, and especially in cities with a large immigrant population, the personal habits of under-educated or careless tenants create new housing problems. Thus even in a model tenement or dwelling a bad tenant may create dark rooms by hanging black curtains over the windows or keeping the blinds closed. The best water closet bowls are no

better than the worst when careless tenants leave them unflushed. An upstairs dwelling may become as damp as a cellar dwelling if the windows are kept closed and large washings are done and hung up daily in the apartment. The three problems just mentioned are comparatively rare and are very difficult to handle when found, for education is everywhere a slow process. To insure the safety of other tenants it is necessary, however, for the public to enforce a constant and high standard with regard to upkeep of dwellings, which means that filth* must be removed, vermin exterminated and toilets, halls, stairs, yards, piazzas, fire-escapes, courts and passageways must be kept clean. In a city which, like Newark, is unceasingly flooded with new immigrants, regular and frequent inspection of premises is necessary.

Overcrowding of Rooms.

Every city which has admitted immigrants from southern and eastern Europe is now faced with the problem of controlling the overcrowding of rooms. It is customary among these races for married persons to hire an apartment of three or four rooms and grant a considerable portion of its space to lodgers, usually for a payment by each of approximately one dollar a week for the use of a part of a bed or a mattress on the floor and including sometimes the washing of clothes and the cooking of food. The original tenants of the rooms are able by this means to meet their rent easily and save money, the lodgers are able to live among their own race and to have some, at least, of the comforts of home. The taking of lodgers in this way is not invariably a serious problem, especially where lodgers are relatives of the family that hires the tenement and where rooms are large and the lodgers and children few. The problem arises when lodgers are crowded several to the room or bed, or where there are growing children who must sleep or live among them. There may be a real problem of room overcrowding where there are no lodgers at all if parents permit growing children to sleep in the same room with themselves or if children of both sexes sleep together, as is quite frequently the practice among certain classes.

Overcrowding, taking the form of large families in small quarters, is to be found among the poor of any city. Ignorance of the laws of hygiene, including sex hygiene, often results in unnecessary crowding during sleeping hours when apartments are large enough to provide ample privacy for all members. The

*For extreme example see photograph (No. 43) of house on corner of — Street and — Alley; also Lister Ave., (Nos. 34 and 35).

lodger evil is confined largely to the races of southern and eastern Europe. Few lodgers were taken by the Jews of the Prince Street blocks (only 48 families out of 248) or by the mixed races of the Augusta Street blocks (9 out of 65 families). On Eighth Avenue, chiefly Italian, lodgers are more frequent. The following table shows an average of more than two persons per room, kitchen included, in 28 out of 101 families (in one instance there were 12 persons in a three-room tenement). An extreme example illustrating how bad conditions may exist where least suspected, is of a family of six sleeping in two beds in one windowless room on Springfield Avenue.

It has usually been the custom for Boards of Health to specify that rooms shall contain a stipulated number of cubic feet of air capacity per individual and to forbid tenants to crowd beyond that point. The standard in Newark for tenement houses (Section 1, Ordinance of Sept. 1, 1903) is 400 cubic feet of air per adult. A standard of this sort is arbitrary, for the frequency of air renewal and the maintenance of a proper relation of heat and humidity are of much more importance to the health of the occupant than the cubic air capacity of the room. No satisfactory standard, however, has been reached by other cities. So it is a general practice for Health Boards to make use of the arbitrary standard already defined when they perceive that tenements are flagrantly overcrowded to a point where there is obvious danger to health. It is obvious that only the worst cases are reached by a law of this sort, and that conditions which endanger the morality and vitiate the air supply of sleeping tenants can prevail even under a provision of the above nature, when properly enforced. By means of watchfulness, occasional night inspection, and specification of the number of occupants to be allowed in each room, making the owner responsible to the court if overcrowding is discovered, it is possible to eliminate the worst cases of overcrowding. The taking of lodgers may be reduced by requiring a permit from the Board of Health. These rules should be made to apply to the one and two-family houses where conditions quite as serious may be found.

SECTION III—THE FIRE PROBLEM.

Within the Fire Limits.

In 1911 Newark had 15,973 buildings of brick or stone and 35,596 of frame construction. The former are largely industrial and commercial buildings, but comprised also many hundred residences and tenements, most of which lie within the city fire limits. The latter consist of old buildings, chiefly residential,

**NUMBER AND COST OF ONE AND TWO FAMILY
HOUSES FOR WHICH PLANS WERE FILED IN 1911.**

COST (\$)	ONE FAMILY	TWO FAMILY
\$ 800	1	
\$1000	4	
\$1500 to \$1800	1	3
\$ 2000	25	4
2100 to 2400	6	1
2500	23	0
2600 to 2900	12	1
3000	29	26
3100 to 3400	3	7
3500	13	23
3600 to 3900	3	2
4000	6	58
4100 to 4400	3	4
4500	3	31
4600 to 4900	5	11
5000	10	34
5100 to 5400	0	1
5500	2	14
5600 to 5900	1	0
6000	5	15
6100 to 6400	0	1
6500	1	1
OVER 6500	31	11
TOTAL	187	250

8TH. AVENUE BETWEEN NESBITT AND SHEFFIELD

NUMBER OF FAMILIES OF GIVEN NUMBER OF PERSONS

OCCUPYING GIVEN NUMBER OF ROOMS.

	1 ROOM	2 ROOM	3 ROOM	4 ROOM	5 ROOM	6 ROOM	UNKNOWN	TOTAL
1 PERSON		2						2
2 PERSONS		6	2					8
3 "		4	4	1				9
4 "		5	6	4				15
5 "		6	9	3				18
6 "		4	11	5	1		1	22
7 "		2	5	1				8
8 "			2	4				6
9 "			1	3	2			6
10 "				3				3
11 "			1			1		2
12 "			1					1
13 "					1			1
TOTAL NO OF FAMILIES	0	29	42	24	4	1	1	101

scattered through the heart of the city and of thousands of three and two and one-half-story wooden buildings, housing from two to eight families per entrance. The older frame tenement houses were occasionally of multiple construction; one on Albert Avenue, Nos. —, containing 36 apartments (each with two dark rooms). Many were four stories high and built to the lot line. Most of them were built within a foot or two of neighboring buildings (photographs Nos. 1 and 33). Such buildings are not only dark and ill-ventilated in their interior rooms, but they are also a serious fire risk—a condition aggravated by the careless habits of their occupants.

Outside the Fire Limits.

Outside of the fire limits practically all new construction is still of wood—a few Roseville apartment houses and Italian tenements (Silver Lake) constituting the chief exceptions. Three-deckers—for 3 or 6 families (photographs Nos. 8, 15, 21)—are the rule, especially in Wards* 13, 14 and 16, but prevail in some streets of every outlying ward. Two-family houses are now constructed chiefly in Wards 8 and 16 and in Vailsburg (photograph No. 10), one-family houses only among the well-to-do in Forest Hills, Roseville and near Weequahic Park—a few of more modest character in Vailsburg (photo. No. 5)—and a few home-made shacks (photo. No. 3) of laborers near the marshes or the Belleville line.

Frame Dwellings.

For the year ending Dec. 31, 1910, 758 new frame dwellings were constructed in Newark, but only 131 new brick dwellings were constructed, indicating a vast predominance of inflammable construction. Most of these frame buildings were in Ward 16, which had 216. Next came Ward 13, Vailsburg, with 161, then Ward 9 with 133, and Ward 8 with 132. Wards 8 and 11 led in brick construction, with 18 each, Ward 10 came next with 15. For three years Ward 16 (Clinton Hill) has led in frame buildings, 175 in 1908, and 261 in 1909, and 216 in 1910. Ward 13 (Vailsburg) was second with 161, 188, 157, and Wards 9 and 8 at opposite ends of the town taking third or fourth place, leaving Ward 11 each year as fifth.

Frame Tenements.

Approximately half of the new frame buildings of Newark are tenement houses (built for three or more families). The

*Note: Ward boundaries of Jan. 1912 are used here and throughout the report.

Board of Tenement House Supervision of New Jersey has record of 306 new tenement houses in Newark, for which plans were filed between January 1st and August 26, 1912. Of these 306 tenement houses, 224, or 73%, were of frame construction and only 82 of brick. The frame houses were planned to accommodate 859 families. The brick houses provide dwellings for 771 families. The large majority of tenement houses of this year are therefore frame houses. Of these, 159 are of the three-family type, 2 are four-family houses, 6 are five-family houses and 56 are six-family houses. The prices of frame houses ranged from \$3,500 to \$12,000. The usual price of construction of three-family frame houses is \$5,000, 78 having been built at that price during these eight months. There were, however, three at \$3,500, five at \$4,000, fourteen at \$4,500 and forty at \$6,000, fifteen of a better class having been built for from \$7,000 to \$9,000 each. These houses are usually built in quantity—a contract being made for three or more. It is probable, however, that the price is consistently understated in order to avoid high taxes and fees.

Six-family frame houses are built for from \$6,000 to \$12,000—the usual price being \$7,000. There were nine houses of this type, stated to cost \$6,000 (or only \$1,000 per family) and nine at \$8,000.

Brick Tenements.

The brick tenement houses provide for from 3 to 27 families each at prices ranging from \$5,000 (for a four-family house) to \$42,000—the price stated for an eight-family house. The larger tenement houses during this eight-month period were all of cheap types, expending with few exceptions from \$1,000 to \$2,000 per apartment. Five houses were planned at a cost stated at less than \$1,000 per flat. Of these, one was an eight-family house—price \$7,000, two were sixteen-family houses, prices \$13,000 and \$15,000, one a seventeen-family house at \$16,000, and one an eighteen-family house at \$15,000. Though the prices are probably underestimates of the real cost of the tenements, they may be taken to indicate a condition which is undesirable—namely, that the law permits brick tenement houses of four and five stories to be built largely of wood interior—cheap but inflammable. The conflagration risk is somewhat reduced by the requirement that the outer walls and public stairs and halls shall be fireproof, but otherwise partitions between the rooms and apartments are chiefly of wood, seriously reducing the safety of the tenants.

The Fire Risk.

Newark is thus a city with a serious conflagration risk. Within the fire limits of the city old inflammable buildings crowd against their neighbors—in the new quarters building is chiefly of wood, and new frame buildings may be constructed within three feet of the lot line. Frame buildings may be constructed three stories or 40 feet high and may house six families, so that the carelessness of each is a continuous menace to his neighbors, above or below and on each side (the brick partition in new six-family houses partially reduces the lateral risk). Brick tenement houses of less than six stories are fireproof as to exterior and halls, but dangerous within and no barrier to conflagration. In Newark few buildings are required to be fireproof throughout unless 65 feet or more in height (Building Code, Chapter XIX, Section 104), or unless tenement houses of over five stories. Newark thus has all the conditions—close building in wood, or in brick and wood, inflammable roofs and piazzas—which made possible the great Chelsea fire of Boston three years ago. A fire well started among the wooden tenements, with high favorable wind, may at any time destroy millions of dollars of property—and perhaps the lives of many people.

Fire-Escapes.

Fire-escapes are a mere palliative. In Europe, cities generally require that all new tenement houses shall be absolutely fireproof. In America, however, where wooden construction is much cheaper than brick, we have become accustomed to build highly inflammable homes, and then attempt to reduce the danger by placing fire-escapes on all buildings above a certain height. The Tenement House Act in New Jersey requires fire-escapes on tenement houses four stories or more in height. Records show, however, that deaths and accidents are frequent from fire in wooden tenement houses of three stories. The Newark Building Code requires two means of egress on all three-story tenement houses, and this proves adequate in most fires. But occasionally when fires start in the cellar, or first story, both means of egress may be rendered impassable by flame or smoke and fatalities may occur.

Even from the four and five tenement houses where iron fire-escapes are provided egress is frequently checked by heat or flame at lower stories or because of the mattresses, bedding and other articles which tenants have placed upon their balconies. The law makes encumbrance of fire escapes a misdemeanor, but a cursory examination of the fire-escapes of the city will show very frequent violation. The photograph for Prince Street (No. 6) illustrates a typical condition.



Two-family houses. One of the most promising and desirable types of houses, having all the advantages of the three and six family frame houses, but with more privacy and a somewhat reduced fire risk. If the space between the houses were increased by 4 ft. and roofs were made fire-proof, as required by the building ordinances of some cities, the fire risk would be considerably reduced; for conflagrations spread largely from the showers of cinders on wooden shingles. The truncated third story leaves a bare ell with flat roof which makes these houses ugly when viewed from the side or rear.



A street of homes. Practically every house on the street is owned by its occupant. Premises are well kept and many of the gardens are peculiarly attractive. It is still possible for the workingman to live in a single house of from five to six rooms on the cheaper land on the outskirts of the city. This is the most desirable kind of housing, for it combines privacy, responsibility, pride in the home, family integrity, beauty of premises and an environment for the bringing up of infants and children which is healthful and free from moral contamination.

CHAPTER II.

LEGISLATION AND THE HOUSING PROBLEM

SECTION I—GENERAL STATEMENT.

Inadequacy of Restriction in New Buildings.

The housing problem of no city is met until that city can legally prevent the erection of any new building that is prejudicial to health, safety or morality. The preceding section shows that buildings unsafe from fire may still be erected. It is also still possible in Newark to erect buildings that will be unhealthful from lack of proper sanitation, adequate sunlight and ventilation. The lodging house ordinance, although excellent in its sanitary provisions, permits the use of unventilated windowless cubicles for night lodgings. Lot congestion has not yet become a serious problem in Newark, but is possible still; for the local building code has a lower standard than the State Tenement House Act. It permits new hotels, to cover 90% of an interior lot and 95% of a corner lot (Section 10) and one and two-family houses to cover 80% of interior lots (Chapter II, Section 6)*.

The tenement house act still permits five-story tenement houses to be built with outer courts only 4 feet wide and 65 feet long. An example of this latter type with courts somewhat wider in which the lower apartments are inevitably gloomy may be found at No. — Charlton Street. A more serious example at No. — Prince Street shows the danger of permitting basement rooms to be occupied on such a shaft-like court (55' x 6', see photographs Nos. 6, 27, 30, 31) for the three rooms behind the store which are used for dwelling purposes are all so gloomy by day as to be unfit for habitation.

It is possible to build tenement houses on streets that are not provided with sewers. It is possible to build factories in residence quarters where soot or dangerous gases may destroy the pleasure and increase the work of living and may actually impair health.

*Examination of the specifications of two-family houses for which plans were filed in 1911, shows that 196 covered less than 50% of the lot, and 20 more covered from 50 to 70%, leaving only 5 two-tenement houses which covered more than 70%, only one covering more than 75%. (No information was given with reference to lot covered in 10 instances). It is evident, therefore, that builders of two-family houses do not yet take advantage of the laxness of the law. It is equally evident that the law should be made more strict now when no serious opposition would be encountered.

The Justification of Public Interference.

It is the recognized function of state and local governments to protect the life, health, safety and welfare of each citizen from the intrusion of others.

It is thus the government's function to determine what shall be the indispensable minimum conditions of health, safety and welfare to be afforded to occupants by the construction, sanitation and maintenance of buildings, new and old, and to force all landlords and tenants to conform to such minimum. In recognition of this duty, sanitary codes, building codes and tenement house acts have been passed and enforced. Boards of Health, Building Departments, Tenement House Departments, and the courts are entrusted with the enforcement. Public action in America usually ends at this point. It will be shown later, however, after consideration of these first matters how organizations, private and public, can influence and improve in new ways the housing conditions of the city and how the City Plan can direct and co-ordinate both private and public measures for the prevention of evil housing conditions.

SECTION II—EXISTING HOUSING LEGISLATION IN NEWARK.

Scope of Present Codes.

After a careful study of housing conditions has been made in any city the essential first step toward housing reform is the enactment of legislation, which will prevent the recurrence in new buildings of any conditions which endanger life or health, and which will eliminate dangerous conditions from buildings already erected. The construction of all new buildings in Newark is guided by the local Building Code, which was enacted in 1911. The sanitary conditions of dwellings are regulated by the Sanitary Code of the Board of Health, enacted by that Board in 1902 and but slightly amended since that time. A local Fire Prevention Code, approved in December, 1910, and amended on May 3, 1912, has provisions governing the fire risks of dwellings. The Lodging House Ordinance, which was passed in 1910, and becomes operative this year, governs the sanitation and maintenance of "every building in which ten or more persons are lodged for a single night or longer at a charge of 35c. per night or less for each person."



Six-family houses. A type of houses that is ugly and inflammable. The side rooms are usually sunless. It is possible for the city to eliminate this type of house from the parts of the city now unbuilt.

New Jersey Tenement House Act.

All of these local codes except the Lodging House Ordinance are consistent with* the provisions of the Tenement House Act of New Jersey, which was passed in 1904. This latter is a compulsory state law, applying to all tenement houses within the state, erected both prior and subsequent to the enactment of the Act. At the time of its passage the Tenement House Act was the best of its kind in America. It still leads in some details and is not far behind the best in the majority of its provisions, and has served as a model for many state and local laws since its enactment. The administration of the Act is in the hands of the State Board of Tenement House Supervision, with offices in Union Building, Newark. There is nothing in this Act that should prevent its continuous improvement from year to year, but the Act has not been amended materially since its enactment in 1904, except for an excellent provision in the laws of 1911, Chapter 322, which permits the State Board to stop all work in any tenement house in process of construction or alteration in which any violation of the Act has occurred, until such violation is removed.

Relation of Local Codes to State Act.

Local boards of health and building departments of New Jersey have power to make more strict in the local codes the provisions of this Act. Yet the only provisions of the local Ordinances of Newark which improve in any marked way upon the State Act with reference to tenement houses are the following:

Building Code, Section 145, forbids erection of three-story frame double tenements, known locally as "double deckers" (the six-family frame tenement with a common entrance). The six-family tenement with a brick division wall from cellar to roof, separating the two families on each floor, is still permitted.

Building Code, Section 145. "The covering of roofs with wood shingles is prohibited." Specifications, Section 93.

Amendments to Board of Health Ordinance. Section 778.

"Section 778. No owner, agent or lessee of any building or any part thereof shall lease or let, or hire out the same, or any part thereof, or allow the same to be used or occupied as a place in which or for any one to dwell or lodge, unless such building or such parts thereof so to be occupied as a dwelling or lodging shall be kept sufficiently lighted and ventilated, and provided

*Required by section 185 of that Act.

with proper water-closet accommodations, and are at all times in that condition of cleanliness and wholesomeness for which this code provides, or in which such code requires such premises be kept."

"Section 778a. In all tenement houses where separate water-closets are not maintained for each family, and in all business places separate water-closets shall be provided for each sex, arranged so as to secure absolute privacy; in dwellings or places used as a permanent place of abode for persons at least one water-closet shall be provided and maintained for each seven persons."

"Section 829a. No rabbits, guinea pigs, pigeons, chickens, ducks, geese, or other fowl shall be kept within the city of Newark except under the following conditions:

"A. A permit shall be required therefor from the Board of Health, which permit shall be revocable at the pleasure of said board, and must be renewed annually. A fee of one dollar shall be paid by the person receiving such permit.

"B. That under no condition shall any of the above-mentioned animals or fowls be kept or maintained in tenement houses or tenement house yards."

"Section 782a. That no owner, agent or lessor, of any building shall allow any chimney, smoke pipe, smoke stack, flue or any part thereof, or any connection therewith, to be or to remain in any way defective or out of repair, so as to allow coal or illuminating gas, or any noxious fumes or odor to escape therefrom into said building."

Limits of the Various Codes.

In general it should be stated that the Building Code regulates in detail the materials and structure of buildings—with especial reference to safety, and the Sanitary Code provides in detail for the plumbing, drainage, and general sanitation of all buildings, and for the abatement of nuisances and for healthful maintenance.

SECTION III—RECOMMENDED CHANGES IN TENEMENT HOUSE LAW.

The Need.

In every large American city a thorough examination of housing conditions will reveal (1) that the existing laws are unevenly enforced; (2) that existing laws are not adequate to insure proper living conditions for the entire population—even if enforced. Newark, though better off than most American

cities in this respect, is not an exception to these rules. The following Section indicates the gaps or inadequacies in the legal provisions of State and City concerning tenement houses.

Definition of Tenement House.

Article I, Section 1, Paragraph 2 defines a tenement house as "any house or building or portion thereof which is rented, leased, let or hired out to be occupied or is occupied as the home or residence of three families or more living independently of each other and doing their cooking upon the premises . . ."

Many cities and states have already discovered that it is essential to include the two-family house under the provisions of the Tenement House Act. It is possible in Newark today under the local building and sanitary codes to create living conditions in new two-family houses which would not be permitted in the new-law tenement, and would be seriously detrimental to the health of occupants. The definition of a tenement house should include the two-family house, and should be changed to read in substance as follows:

"A tenement house is 'any house or building or portion thereof which is rented, leased, let or hired out, to be occupied or is occupied, or is intended, arranged or designed to be occupied as the home or residence of TWO or more families, living independently of each other, and includes apartment houses and flat houses, but does not include hotels. Dwelling houses occupied or intended to be occupied as the home or residence of one family or more, if built in rows, or with the side walls less than one foot distant from the nearest wall of another building; or if the halls, stairways, yard, cellar, water supply, water-closets, or privies, or some of them are used in common, shall be deemed to be tenement houses and shall be subject to all provisions.'"

It is possible by the enactment of this definition and by making a few necessary changes in the sections regarding fire-proofing, fire-escape, size of yards, courts, etc., which are explained in succeeding paragraphs, to afford all necessary supervision to the construction and maintenance of houses in the congested quarters of the city and to prevent the construction of dwellings, which endanger life or health. The definition substantially as given above has already been adopted by the following cities and states: Columbus, O., Montreal, Q., Chicago, Ill., Milwaukee, Wis., Toledo, Ohio, and the State of Indiana (Act of 1909, Chapter 47), and has the approval of the National Housing Association.

A number of minor modifications are necessary throughout the act which could be made wisely, only after careful study of

the housing codes of the cities mentioned in this section and the revised Model Tenement House Law by Lawrence Veiller.*

Percentage of Lot Covered.

Article III, Section 1, Paragraph 88, provides that no tenement house hereafter erected shall occupy more than ninety per cent. of a corner lot or more than seventy per cent. of any other lot. This provision should be modified so as to prevent any tenement or dwelling house hereafter erected from occupying **either alone or with other buildings** more than eighty per cent. of a corner lot or more than sixty per cent. of an interior lot. (Model Tenement House Law Rev., Chapter II, Paragraph 10. See also the laws of Indiana, which restrict to 85% and 65% respectively, Cleveland 65%, Columbus 75% and 50%, and the Massachusetts Tenement House Act for towns restricting to 65% for corner lots and 50% for interior (Pt. II, Sec. 9).)

Height.

Article III, Section 1, Paragraph 90, permits houses to be erected to a height equal to one and a half times the width of the widest street on which they stand. The result is darkened rooms and sunlessness on lower floors. A future law should not permit tenement houses to exceed in height the width of the widest street on which they stand. This provision as amended will be found in the Massachusetts Tenement House Act for towns, and in the Housing Codes of Columbus, O., the building Code of Washington, D. C., and many large European cities, Liverpool, Glasgow, Berlin, &c.

Yards.

Article III, Section 1, Paragraph 92, provides that the depth of the "yard behind a tenement house hereafter erected fifty feet in height shall be not less than sixteen feet in every part; said yard shall be increased in depth one foot for every additional twelve feet of height of the building above fifty feet." This provision is most inadequate, especially when applied to the tall tenement house. If any part of Newark should be built up compactly with high apartment houses in conformity with the minimum provisions of the present law, the interior of the blocks would suffer from utterly inadequate ventilation and light. Yet this is a possibility which must be considered seriously, for

*A typewritten copy of this book as amended can be consulted through the National Housing Association at 105 E. 22nd St., New York City.



A row of new-law tenements, four stories high with basement. Fire escapes are encumbered in spite of law. At the rear of these houses are courts approximately 55 ft. deep and only 5 ft. wide. The lower floor rooms at the ends of these courts are very inadequately lighted. Unless the provisions of the tenement-house act or building code are made more strict with reference to width of outer courts and occupancy of basements, the city will soon be involved in heavy expense for the tuberculosis bred and spread in the dark rooms which this type of construction causes. These buildings already have a tuberculosis record.

Newark is growing rapidly. Most apartment houses in Newark today enjoy sufficient light and air only because their neighbors have not yet constructed tall buildings on the adjoining lots. To protect the city from such contingency it is necessary to prevent new tenement houses of three stories from being erected within twenty-five feet of the rear lot line, or within 15 feet if a corner lot, and the depth of such yard should be increased by five feet for every additional story of height of the building. (Compare Model Tenement House Law Revised, Chapter II, Paragraph 12, and also the Massachusetts Tenement House Act for Towns, which has this identical provision.)

Courts.

Article III, Section 1, Paragraphs 96 to 108, require complete revision in order to secure for your city outer courts and inner courts which shall be adequate in size to permit all rooms to be properly lighted and ventilated. At present the New Jersey Tenement House Act permits an outer court to be constructed which shall be only 4 feet wide, and yet may penetrate into the building to the depth of 65 feet. Such an outer court is scarcely an improvement upon the notorious dumb-bell shafts of New York City built before the enactment of the present New York Tenement House Act. Your present law is much less strict in this regard than the laws of all leading Eastern cities. The New York Law (Sections 56-9) which is not yet adequate, requires inner courts to be at least 12' x 24' for six-story buildings and outer courts 6' x 65',—much stricter than the New Jersey law. It requires only a cursory examination of the first story flats in the large tenement houses built in the Prince Street districts of Newark to show that the law as it stands permits the erection of buildings positively detrimental to the health of the inmates. The following is suggested as a wise minimum provision for your city: "The minimum width of a court for a two-story building shall be ten feet, for a three-story building, twelve feet, for a four-story building, fourteen feet, and shall increase two feet for each additional story. The length of an inner court shall never be less than TWICE the minimum width prescribed by this section; the length of an outer court shall never be greater than twice its minimum width." (Model Tenement House Law Revised, Chapter II, Section 13; see also the Massachusetts Tenement House Act for Towns, which has this identical provision. The State of Indiana, Section 6, requires 12 feet as least dimension for an inner court and 288 square feet as minimum area.) The advisability of abolishing the inner court completely for new tenements

should be considered. At the best the inner court limits sunlight and ventilation and reduces safety and privacy. It is not essential in tenement construction and can be prohibited without causing serious hardship.

Vent Shafts.

Article I, Section 1, Paragraph 5, which defines a vent shaft should be omitted. Paragraphs 127-9, 134-5, should be changed in so far as they authorize the construction of vent shafts in new buildings. All the provisions relating to inner courts should be made to apply where vent shafts are now permitted. Vent shafts are not essential to tenement house construction, and invariably create undesirable conditions, odors, indecent sounds and lack of light and air. All water closets in future buildings should be constructed with light and ventilation from street, court, or yard.

Fire Provisions.

The danger from conflagration in Newark is so serious that a radical change is needed in the fire provisions of the Tenement House Act. In Section 60 is the requirement that "every tenement house hereafter erected six stories or more in height shall be made fireproof throughout." Tenement houses from four to six stories in height are permitted to be of second class construction, with brick exterior and stair halls; three story tenement houses may be of wood outside the city fire limits. These provisions should be amended to require that every tenement house hereafter erected four or more stories in height shall be fireproof throughout, and that three-story tenement houses should have a brick exterior and a fireproof stair hall. By means of this provision it would be possible to prevent the erection of tenement fire traps of the sort which plague the cities of the northern states. If a distance of 10 feet is required between two-flat houses and they are provided with two means of egress from each floor including inhabited rooms in the third half story and with non-combustible roofs, a fireproof exterior will not be necessary. Single-family houses should also have fireproof roofs and should not be built nearer than ten feet from one another. These provisions as suggested are less strict than those in force in the city of Montreal, which forbids all new frame construction, even of single-family houses, and which declares (Section 27) that all wooden buildings hereafter erected contrary to the provisions of the by-law shall be deemed a nuisance, and that it "shall be the duty of the inspector to give notice to the owner or builder of said building to abate such nuisance, and in event



Yard at rear of _____ Street, showing the three outer courts, each about 6 ft. x 55 ft., which light inadequately the lower rooms of tenements erected under the present law. The litter in the yard shows the usual condition of tenement yards in cities provided with an inadequate force of inspectors.

of the owner or builder failing to do so within forty-eight hours, the inspector may cause such building to be demolished and the expenses incurred in so doing may be collected from said owner or builder in court."

The Massachusetts Tenement House Act for Towns (already adopted in Belmont, Arlington and Winthrop) is also more strict than those above suggested in that it requires all three-tenement houses to be fireproof throughout, and forbids any frame building to be constructed within ten feet of the lot line or twenty feet of any other building. This latter provision could not be adopted in Newark until the suburbs are incorporated in the city, and the shape of the building lots is changed (See page 68).

Frame Buildings.

Article II, Section 1, Paragraph 65, permits frame buildings, three stories or forty feet in height to be erected of wood, and to accommodate six families and to be built within three feet of the lot line. To secure complete safety from conflagration, and adequate circulation of air, this provision should be corrected to require that no frame building shall be built more than two whole stories in height or to be occupied by more than four families in all. No new wooden buildings of any kind should be allowed to be built or altered so as to lie in any part within five feet of the lot line or within ten feet of any neighboring building. Guidance in the framing of this modified provision may be found in the Model Tenement House Law, Paragraph 52, and in the Massachusetts Tenement House Act for Towns, Section 10, which requires all frame buildings to be 10 feet from lot line or 20 feet from wall of any other building.

Combustible Roofs.

As a further item in the protection of Newark from conflagration, from its immediate suburbs, the State Tenement House Act should adopt the provision that no dwelling house or tenement shall be erected hereafter with a roof of inflammable material. Serious fires spread largely through the falling of live cinders upon shingled roofs. The following provision, which is to be found in the building ordinance of Somerville, Massachusetts (Section 60), could be wisely copied.*

*See also the Building Law of Brookline, Mass., which enumerates the materials of which such roofs may be constructed. Article VIII, Sec. 5. The City of Newark has a similar provision, but the provision should be made to cover the suburbs adjoining or Newark may suffer from conflagration in neighboring suburbs.

"Every roof hereafter constructed shall be covered with a non-combustible roof covering satisfactory to the inspector of buildings.

"Whenever a non-combustible roof covering is hereafter replaced in whole or in part, the new roof covering shall be non-combustible to the satisfaction of said inspector."

Fire Escapes.

Fire-escapes are at present required on "every non-fireproof house hereafter erected more than three stories high." Many serious fires have occurred in three-story tenement houses, in which egress of tenants of upper floors was cut off by flames or smoke-filled hallways. Unless three-story tenement houses are provided with two outside fireproof stairways, one of which is directly accessible to each apartment, they should be provided with iron fire-escapes of the type specified in Sections 35-47. A provision of this general character is already locally enforced in Jersey City. Iron fire-escapes, though of less safe character, are also required on three-tenement houses in New York City and Buffalo. This provision should apply to all buildings, whether new or old.

Windows.

In addition to the general requirements with regard to height, size of yards and courts, and the percentage of lot to be covered, which have already been indicated, a few minor specific changes in the Tenement House Act should be made. For example, in Sections 114-15, the Tenement House Act excludes water closets from its general provisions concerning size of windows. This is a concession to custom which is unjustifiable from the health standpoint. Light and air are very necessary in toilet compartments as disinfectants and cleansers, and toilets should be provided with windows as large proportionally to area as those in other rooms. The healthfulness of tenement homes would be increased if the Act required all rooms to have windows equal to one-seventh of the superficial floor area instead of one-tenth, as now required. This stricter provision is suggested by the Model Tenement House Law and by the Massachusetts Tenement House Act for Towns.

Size of Rooms.

For the same reasons, also, it is probably wise to specify minimum sizes for rooms. New Jersey, in Section 116, requires that in every tenement house there shall be at least one room



Vacant lot being filled with garbage. This lot is 25 ft. wide and on each side of it is a residence. The stench is almost unendurable. The house at the right has basement living rooms and is poorly constructed. The neighborhood is a disgrace to the city. Conditions of this type are unnecessary and are tolerated in few American cities to-day.



Unsanitary houses within a block of the court house. On this blind alley are several wretched dwellings, at least two of which are located over stables. Such conditions are not tolerated in many progressive cities.

containing not less than 120 square feet of floor area, and that each room shall contain at least 70 square feet of floor area. A number of cities today make 90 square feet the minimum floor area, and the Massachusetts Law and Columbus Ordinance require one room in each apartment of 150 square feet floor area—thus giving ample room for space needs, reducing danger of overcrowding, and removing one of the chief conditions which renders tenement houses cramped, confining, and repellant to the growing boy and girl, driving them to street, saloon or dance-hall.

Crowding and Air Space.

Provisions in the New Jersey Act with regard to the amount of air space in rooms are specified in Section 142. "No room in any tenement house shall be so overcrowded that there shall be afforded less than four hundred cubic feet of air for each adult, and two hundred cubic feet of air to each child under twelve years of age occupying such room." The Model Tenement House Law and the Housing Code of Columbus, O., require 600 cubic feet of air to each person over twelve years of age and 400 cubic feet to each child. Provisions of Rochester, New Orleans, Ottawa, and a number of other cities make use of this higher standard. It must be stated that this requirement is somewhat arbitrary in character, for where there is thorough ventilation the health of occupants may not be impaired in rooms containing less than 400 cubic feet of air space for each adult. It is desirable, however, for Health Boards and the Tenement House Department to have a high standard of this sort, which they may apply in apartments in which there is evidence that there is crowding to an extent dangerous to health or morality. No completely satisfactory alternative for a provision of this character has yet been suggested. Section 778 of the Amended Health Ordinance, however, contains a valuable supplementary requirement. (See page 27).

Dark Halls.

It is still possible to build tenement houses in Newark with dark halls. Dark halls are socially undesirable, both because they form an environment favorable to the long life of disease germs deposited there, because there is danger from accident on the dark stairways, and also because of the temptation to immoral practices which they afford, especially for the growing children of the tenement. Section 118 of the Tenement House Act requires tenement houses occupied by more than two families on

a floor or exceeding four stories in height to have windows in public halls. This should be amended to require windows in public halls of every tenement house—such window to open directly upon the street, yard, or court, of at least the minimum dimensions specified in this Act as amended.

Section 123 requires dark halls in old tenement houses four stories or more in height to be rendered lighter by the removal of panels of doors to apartments, replacing the panels by translucent glass. This provision should be made to apply to all tenement houses (including the two-flat house as newly defined, p. 29). save that windows should be cut to the outer air from such hall wherever that is possible.

Cellars.

Section 130 permits cellars to be occupied for living purposes under specified conditions. Cellar dwellings should be prohibited in all buildings, new or old. Basement dwellings should be forbidden in all new buildings save that a special permit for basement apartments for janitor may be secured from the Board of Health, under the conditions specified in Section 131, and permits for continued use of basements now occupied might be granted in accordance with Section 130. No such permits should be granted if such basement is damp at any time of year, and no room in such basement should be occupied unless it is penetrated by sunlight throughout the year. Some cities and states have forbidden absolutely all living in basements, as well as in cellars. Such a provision will be found in the State Law of Indiana (Section 19). No new basement dwellings should be created; old basement dwellings should be emptied wherever any danger to health can be shown to be present or imminent.

Water Closets.

A few amendments should be made in the sanitary provisions of the Act. Section 160 requires at least one water-closet compartment in every new apartment. The Act should require that a separate toilet be provided for each family in old buildings as well as new, and that wherever possible, such toilet should be within the apartment. The cellar toilet should be prohibited absolutely in all dwellings, save, of course, as an accessory. Section 161, which permits yard toilets for tenement houses of three or four stories, should be further amended to discourage as far as possible the provision of yard closets. No yard closets should be permitted for a tenement house or dwelling of any height where it is possible to place toilets within the

apartment, or if not within the apartment within the hall. Doors of all toilet compartments should be required to be provided with locks or bolts.

Water Supply.

Section 170 now reads, "Every now existing tenement house located on any street in which water mains are laid shall be properly connected to such water mains, and shall have at least one sink within each apartment; provided, however, that in tenement houses where a sink is now installed on each floor, in the public hall, such sinks shall be deemed sufficient." This section should be amended by eliminating the proviso, thus permitting no exception to the requirement, that there be sinks in each apartment. The common sink is subject to the neglect always accorded to common property. It furthermore puts cleanliness at a premium.

Why Such Changes Should be Made Preferably in the Tenement House Act.

The above changes have been recommended for the Tenement House Act rather than for the local Codes because it is desirable that all of these requirements should be enforced in all cities of the state. If Newark alone should adopt these requirements, the city would to some extent suffer from the absence of similar provisions in neighboring cities. For the illness made possible by inadequate legislation in Elizabeth or Orange may be carried to the citizens of Newark, or a conflagration in the wooden buildings of Orange may cross the city line. The insanitary conditions on the edge of Belleville affect the citizens of the Silver Lake District. Furthermore, if Newark should be more strict than its neighbors in its building requirements, new, cheap tenement houses would be constructed in large numbers just outside the city line, where the evils that they create can injure seriously the health of Newark citizens, but where their Board of Health would have no jurisdiction.

Changes Should be Made Cautiously.

Utmost caution must be exerted, however, in any attempt to improve the Tenement House Act. The interest and approval of leading citizens and the general public in other New Jersey cities must first be elicited, otherwise more would be lost than gained by any attempt to change the Act. Short-sighted builders and speculators, and ignorant immigrant tenement-house owners would quickly combine to overthrow many or all of the

important features of the existing Act, especially those concerning enforcement. Many short-sighted architects and owners of good intention would join this combination because of failure to perceive that the health of the people and the welfare of the state is at stake. The Tenement House Act should not be tampered with until the Boards of Trade and the philanthropic organizations of all the leading cities of New Jersey are informed of their local problem and of the necessity of change and are ready to back such changes as will cause marked improvement in that Act, and in the facilities for its enforcement.

SECTION IV—RECOMMENDED CHANGES IN BUILDING CODE.

General Recommendations.

While awaiting the thorough organization of a state-wide housing reform many of these provisions may be adopted locally by means of amendment to health and building codes. At present the building department concerns itself exclusively with the consideration of structural details. In the majority of large American cities, in which no state tenement house act is operative, building departments are entrusted with the enforcement of provisions concerning lighting and ventilation. Your Building Department at present assumes that it has no jurisdiction here and leaves such matters to Health and Tenement House Departments. There should, however, be specifications in the Building Code prohibiting the construction of dark rooms or windowless rooms and halls even in one and two-family houses, forbidding the construction of three-story frame tenement houses (as recommended a few years ago by Mayor Haussling), requiring the cutting of windows in dark rooms and halls of old buildings.

Specific Recommendations.

A few specific recommendations for changes in the existing code may also be offered. Section 6 should be amended (and the Lodging House Ordinance as well) to place in the lodging house class any building in which six or more persons are lodged for a single night or for periods of less than a week at less than 50c. per night.

Section 6 should also be amended to forbid any private dwelling from covering more than 60% of the lot area, or 80% of a corner lot (now 80% and 92%).

Section 10 should be amended to bring the apartment hotel under the provisions of the Tenement House Act.



Interior of block bounded by _____ and _____ Avenues. Houses almost without exception are six-family houses built about six feet apart. Where six families crowd into a house, gardens become impossible. This type of housing is preferable, however, to the brick tenement which fills the whole width of its lot and all but 14 feet at the rear. The generous provision of yard space in this block makes it possible to have a fairly free circulation of air and sunlight in all but side and north rooms at every story.



Two city blocks, largely built with new-law tenement houses by immigrant Italian owners. The white five-story tenement house at the left has an outer court to the yard which is only 3 ft. 8 in. wide (to the lot line) but is 56 ft. deep. If a whole city block were built of tenement houses of this kind, as is possible under the present tenement house act, approximately half of the population would have inadequate light and ventilation. Sunlight would reach less than half the rooms of the block.

Section 28 should be amended to forbid non-fireproof buildings to be erected more than three stories in height.

Section 46 should be eliminated and the construction of light and vent shafts in new buildings should be forbidden.

Section 142 should be amended to forbid frame dwellings to be constructed for more than two families, or more than two and one-half stories high.

Section 145 should be amended to forbid frame buildings to be erected within five feet of the lot line, or within ten feet of any neighboring building.

The last paragraph in Section 146, which permits laxness in the application of rules to outlying portions of the city should be eliminated completely.

SECTION V—RECOMMENDED CHANGES IN SANITARY CODE.

General Recommendations.

The Sanitary Code of the city should be amended to include the provisions with regard to water-closets, sinks, crowding of rooms and occupancy of cellar and basement dwellings already indicated.

Specific Recommendations.

In addition, the Sanitary Code should further be amended as follows: Sections 780, 781, 783 should be made to apply to one- and two-family houses.

Section 814 should be amended by erasure of the words "Unless pursuant to a special permit from this Board."

Section 818, which requires that owners, etc., of every dwelling "shall provide and keep on the premises suitable barrels or receptacles for receiving and holding garbage," should be made less vague. A provision in the revised ordinances of the city is more specific, but places the power of enforcement with the Board of Works. This is essentially a health matter, however, and the Board of Health should be given authority to require that all garbage receptacles shall be of metal and at all times properly covered and should have assistance from the Police Department in the enforcement of this provision.

Section 835 of the amendment should be amended to prevent any manure vault from remaining within 40 feet of any dwelling.

Section 882 should be amended by erasure of the words "or be ventilated by means of a shaft or air duct," thus requiring all water closets to be properly ventilated.

The ordinance of Sept. 1, 1903, should be made to apply to one- and two-family houses, thus making it possible to eliminate over-crowding from the shacks of the Island and Silver Lake Districts, which do not fall under the Tenement Act.

CHAPTER III

ENFORCEMENT OF HOUSING LAWS

SECTION I—THE NEED.

Laws to protect the health of a community, though of model character, are of no value unless enforced. It is obvious from the foregoing discussion that many of the provisions of the state and local laws are not enforced with reference to old buildings. A condition of this sort is likely to breed contempt for government, especially on the part of our recent immigrants, who are very generally the offenders, both as tenants and as owners of tenement houses. To maintain a high standard throughout a city of the size of Newark large inspection forces must be maintained to supervise all dwellings, new and old. It is unfair to criticise the responsible public boards for poor administration of the laws when those boards are inadequately equipped with legal power of enforcement or with inspectors. I am convinced that the work of both the State and local Boards is carried on about as well as could be expected when the smallness of the appropriation and of the staff are taken into consideration.

SECTION II—STATE BOARD OF TENEMENT HOUSE SUPERVISION.

General Statement.

Of the three public bodies charged with the administration of housing laws, the State Board of Tenement House Supervision is the best equipped with legal powers of enforcement, and is the least hampered by political considerations. It also has the best record system and is in general administered with exceptional ability. Its powers of enforcement are not entirely adequate nor speedy when contrasted with those, for example, of the New York tenement house departments.

Penalty Clause.

In general it may be said that the penalties are too low to frighten a certain class of tenement builders from attempts to evade the law and cover up their evasion. I therefore heartily endorse the suggestion made by the Secretary of the State Board

of Tenement House Supervision, in the Eighth Annual Report of that body, page 68, in which that department recommends an amendment to the existing statute which will make the penalty for violation of the Tenement House Law \$100 in each instance. Compliance would be much more speedy if in addition to this increased flat penalty, were added the provision found in Section 124 of the New York Tenement House Law of 1909, in which a penalty of not less than \$10 nor more than \$100 is incurred if the offence is not wilful and of \$250 if the offence be wilful AND IN EVERY CASE OF \$10 FOR EACH DAY AFTER THE FIRST THAT SUCH VIOLATION SHALL CONTINUE OR BY BOTH SUCH FINE AND IMPRISONMENT IN THE DISCRETION OF THE COURT.

Sections 182-184.

Specifically, Sections 182 and 183 of the New Jersey Act are adequate. Section 184 might be strengthened by the incorporation of the following words borrowed from Section 122 of the New York Act. "During such unlawful occupation no rent shall be recoverable by the owner or lessee of such premises for such period, and no action or special proceeding shall be maintained therefor or for possession of said premises for non-payment of rent. The Department of Water Supply shall not permit water to be furnished in such tenement house."

Sections 185-188.

Sections 185, 186, 187 and 188 are in general adequate. Article VI (penalties) should be made more strict in accordance with Section 124 of the New York Act (as above indicated).

Aid of the Courts.

In general the State Board of Tenement House supervision has succeeded very well in enforcing its provisions due to the excellent co-operation of the State Attorney and of the courts. The number of cases in which fines are collected is very small, the owner being allowed some time in which to conform to the law before action is undertaken. Until there is a new provision for the placing of a larger State legal force at the command of the Tenement Department, this procedure is wise, for otherwise, the State Attorney would have more cases than he could handle with ease.

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Inadequate Appropriation.

In general the work of the State Board of Tenement House Supervision is cramped by the wretchedly small appropriation afforded to that department each year. In the year, October 31, 1911, to October 31, 1912, only \$58,800 was appropriated. With this small appropriation the State Board is expected to supervise in every detail the construction of over 1,000 tenement houses built during the year throughout the State, and to keep in proper sanitary condition the 50,000 old tenement houses already built within the State. The office has only 27 inspectors for the entire State, and Captain Allen has very wisely placed the major part of his force at work on new tenement houses to prevent evasions of the law in their construction, leaving only a small portion of the force available to supervise old tenements. Despite this fact excellent work has been done in the upkeep and removal of violations from old tenements as the accompanying table will show. But any regular inspection of old tenements is obviously impossible, thought urgently needed. In fact, not all of the old tenement houses in the State have yet received their first inspection from the Board within the eight years of its existence. Captain Allen, its Secretary, stated at the Tenth Annual Conference of the New Jersey Charities and Corrections that in only five-tenths of one per cent. of these old tenements were no violations found. Ordinarily, from two to twenty violations are found in each house. The housing problem will not be handled adequately in these old tenements until the State of New Jersey trebles its appropriations to the tenement house department. The needs of the Tenement House Department are primarily a larger force and more money.

SECTION III—THE BUILDING DEPARTMENT.

General Recommendations.

The Newark Department of Building is well administered and progressive. It has made important suggestions for the improvement of the local Building Code and has been instrumental in extending the city fire limits. It is, however, chiefly concerned with purely structural problems, and has not assumed jurisdiction over the lighting and ventilation of the one- and two-family houses not covered by the State Tenement House Act. In general the Annual Reports of the department overlook the social aspect of the local building problem. The department has in its possession important information concerning the types of houses which are being built in various parts of the city, but

this information is not compiled and offered to the public. The reports of the Building Department of Milwaukee show the number of one-family houses, two-flat houses and apartments built each year in each ward of the city. Similar statistics should be published annually for Newark.

Fire Limits.

The fire limits of the city, though recently extended, are still not sufficiently inclusive, as examination of the type of building just outside of the fire limits will demonstrate (photo. No. 15). The fire limits, however, need not be extended if the provisions already suggested concerning the fireproofing of three and four story tenement houses are locally adopted.

More Inspectors Necessary.

The Building Department is provided with a force of only 17 employees, 10 of whom are building inspectors. Yet there are from 500 to 800 new buildings in the process of erection in the city all the time. Obviously the department has very little time for any activity save inspection of new buildings. On August 28, 1910, however, a canvass of the old buildings of the city was begun. In two years 3,700 old buildings had been inspected, of which 1,181 were found to have violations of the fire-escape provisions of the Code. As there are 55,000 buildings in the city, it would take the department at this rate about thirty years to cover all the existing buildings. This important work cannot be conducted efficiently and thoroughly without an increased force of inspectors.

Danger in Board of Appeals.

The department controls new construction through the requirement that plans shall be filed and permits granted for all construction. Enforcement is aided through the establishment of penalties (Section 151) which are fairly adequate. The department furthermore has power to vacate and demolish unsafe structures (Section 148). Fifty buildings were condemned by it last year. The power of the department is, however, materially reduced through the right of appeal from its decisions provided in Section 150, granting to the Committee on Construction and Alteration of Buildings of the Common Council power to reverse the decision of the Superintendent of Buildings. Appeal is likely to result in the nullification of the law in any city. The power is always dangerous, but especially dangerous when left

to a committee of political construction. It would probably be wise for Newark (or perhaps a special committee from the Board of Trade) to make a detailed study of all the appeals granted within the past two years, and of the reasons for which the decision of the Superintendent of Buildings has been overthrown. (Three hundred ninety-one appeals were granted by the Common Council Committee last year.)

Political Favors.

Some complaint has come to me that much of the time of this and other municipal departments has been wasted by persons and even by officials outside of the department who want favors in construction of their own buildings, or those of their friends, and jobs for friends or relatives. This department is evidently firm in its refusal of such overtures, but its official work could profitably be promoted by elimination of unnecessary difficulties of this sort. A live public opinion demanding high standards of all municipal employees would accomplish much in facilitating the administration of the local departments charged with the protection of public health and safety.

SECTION IV—THE BOARD OF HEALTH.

Susceptibility to Popular Demand.

The Board of Health is charged with elimination of conditions causing disease, or, to state the function positively, with the maintenance of conditions which will promote the health of citizens. Its task is huge and unceasing, comprising the maintenance of laboratories, dispensaries, disinfection corps, hospitals, etc., in addition to the inspection of foods and buildings. This large and important work is performed at least as well as in the average large American city. There are fads in public health control to which public health departments must be responsive. Of late Newark citizens have been most interested in the provision of institutions for the tuberculous, in public dispensaries, and most recently in milk supply, hence the sanitary inspection of the Board has been maintained without the incentive which a live public opinion should afford. The result is not so much neglect as a lack of aggressiveness. Public officials are responsive to popular demand, for their positions are dependent upon such responsiveness. If the citizens of Newark are not content with the existence of conditions of the sort described in the sample blocks investigated, their remedy is to demand more aggressive action from the Health Board—and to PAY for it.

Small Proportion of Public Funds Spent on Prevention.

It is a striking commentary on the superficiality or the preoccupation of the American people that they are willing to pay many dollars for palliatives for every one spent in prevention. Newark is no exception. In 1909 Newark spent \$576,000 on fire service (ten times the whole State appropriation to that excellent agency of prevention—the Tenement House Department) to put out fires, the majority of which might have been prevented. It likewise spent \$740,000 for police protection and about \$500,000 on charities, hospitals and penal institutions. But it granted only \$278,000 to its Health Department, which, with an appropriation doubled or trebled and properly administered, could make notable reductions in the cost of cure and could increase the industrial efficiency and general welfare of the city by improvement in general health.

Mortality and Bad Housing.

The death rate in Newark is about the average prevailing in the larger American cities. Your city should not be content to maintain such a death rate, but should be willing to make an appropriation sufficient to reduce to the minimum the preventable diseases. In the year 1911, 707 persons died of tuberculosis, 37 persons of typhoid fever—both preventable diseases—and there were 701 deaths from bronchitis and pneumonia, now often classed as bad-air diseases, and partially occasioned by bad housing conditions. Unsanitary homes are also partly responsible for many other diseases—either directly or by reducing vitality and rendering the individual susceptible to disease. It is perfectly obvious that it would be wisdom for your city to spend several thousand additional dollars per year in the removal of the causes of preventable diseases, rather than to spend, as it does, hundreds of thousands of dollars in charities, hospitals, prisons and other agencies, which merely cure the individual whom preventable conditions have in most cases made ill.

More Inspectors Needed.

The number of health officials in Newark should be more than doubled. At present the Board employs only 18 for the whole city—an obviously inadequate number. Within his district each sanitary inspector must look up all complaints (there were 3,488 in 1911), inspect plumbing, stables, markets, etc., and then may devote such time as is left to the voluntary inspection of dwellings. Only 15,783 original inspections are recorded for

1911, though there are over 40,000 dwelling houses in the city. Proper upkeep demands at least monthly inspection of every dwelling or tenement in immigrant quarters. Since the Tenement House Board cannot provide regular inspection of old buildings it is incumbent upon the city to so provide. Since immigrant tenants have not yet learned to report nuisances in any large degree to the Health Department, and since they frequently either fear to offend the owner by reporting or are too ignorant to be aware of the menace, the number of complaints where nuisances exist is still small. Noxious conditions may thus last for days and weeks or even months without coming to the attention of an over-worked department. Frequent regular inspection, though necessary, cannot exist in an under-manned department. A larger force is necessary.

More Records Needed.

The Department furthermore, is quite lacking in proper records of the causes and attendant conditions of the reported cases of contagious and infectious diseases—a second means of attack upon conditions dangerous to health. For example, no record is kept of the home conditions of tuberculous patients, or of the heredity, or the industrial environment of such cases. Very full, careful records are equally necessary for typhoid fever and other diseases, both infectious and contagious.

Investigation of Origin of Infectious Diseases.

A comparison of the typhoid fever map with the population map of Newark shows that typhoid fever in your city is not distributed in accordance with congestion of population, as it would be likely to be if brought to your city through the municipal water supply. As the purity of your water is unquestioned, a second possible source, the milk supply, might be considered. It is of course conceivable that the cases as distributed might have resulted from milk infection or from some other food. It is, however, striking that the number of cases on the outskirts of the city should be so large in proportion to the population of such outlying quarters. The typhoid fever map can prove nothing, but it suggests the desirability of examining with great care the home conditions of all recent cases. Our investigation shows that the disposal of garbage in these outlying districts is very careless. It shows also that stables which are almost unrestricted in outlying quarters are poorly kept. Flies may therefore breed in abundance as carriers of the bacillus. There are some privies in these outlying quarters and occasional surface

drainage. It is probable therefore that there are several sources of active infection from this and other diseases in your outlying districts which demand careful intensive examination and elimination.

Inadequacy of Amount and Enforcement of Penalties.

The powers of enforcement of the Health Department are inadequate. Penalties are low, usually \$5.00, \$10.00 or \$25.00, even for serious offences. Larger fines are not collected where offenders are dilatory.

Conclusions.

The Chicago Board of Health secures and keeps records on over 60 points with reference to each case of typhoid fever in the city. Newark's records are not one-tenth as extensive and are an inadequate basis for prevention of the disease. If accurate records were kept of these, a progressive health board with an adequate staff and appropriation, unhampered by politics could eliminate a large portion of the conditions which occasion illness, and would save the city vast sums in future taxes, would save employers the serious drain which results from irregular attendance at work, and would materially reduce the morbidity and death rates of the city and render it an exceptionally desirable place of residence.

To reduce preventable disease and render homes healthful your Health Board needs more money—and thereby a larger inspection force and better and more permanent records. It needs larger powers and heavier penalties. It needs also the interest, appreciation and aid of an enlightened public opinion which will remove political pressure and the legal handicaps which restrict the Board's effectiveness and which will incite to aggressive action in housing reform.

CHAPTER IV.

THE HOUSING PROBLEM AND REPLANNING OLD DISTRICTS

INTRODUCTION.

General Statement.

The planning of cities involves the adjustment of the physical resources of the city to meet the needs of its population, present and future. The proper planning of cities may be made to affect housing conditions in a variety of ways. The functions of city planning may be considered conveniently under two captions. First, the remodelling of the old city, and second, the determination of the mode of development of new sections. Of these the first program is largely remedial in character, while the second is fundamentally preventive.

SECTION I—THE SLUMS.

Methods of Treatment of Unsanitary Areas.

City planning within the heart of a built-up city involves schemes for dealing in a large way with unsanitary districts. An extreme example of such a district in Newark comprises the major part of Arlington, Augusta, Shipman, and Nicholson Streets. In portions of this district the houses are highly unsanitary and are beyond repair—positively unsafe and dangerous to health and morality. There are many ways in which a district of this sort can be treated. First it may be neglected, as it is today by health and tenement departments that are overworked and unable to deal with a problem so large and apparently hopeless. In the second place an attempt might be made to repair the district, either at the cost of the city or by the city at the cost of the owners (the Birmingham, England, method), or the owners might be ordered to make the necessary repairs at their own expense. Special powers would be necessary if either of the first two programs were undertaken. The third program would undoubtedly result in a patch-work reform. No one of these programs is adequate to meet the conditions of this section. They are merely palliative and might reduce, but would not destroy, the disgrace of this district.



Yard of negro tenement house on _____ Street. This house exemplified extreme conditions of bad repair and maintenance. The hydrant in the foreground serves many families. Just beyond it, not shown here, are several yard water-closets. The yard is dangerously littered with refuse, much of it organic matter dangerous to health. The cellar is in like condition.^a In many cities a house of this character would be condemned as unfit for human habitation.

SECTION II—SLUM CLEARANCE AND MUNICIPAL REHOUSING.

Municipal Housing.

Another possibility would be the complete destruction of the entire area by the city. This might be done with the intention of replacing the area with a park, as was done by New York City, for example, in the case of the notorious Mulberry Bend, or the area could be rebuilt by the city with municipal dwellings or other buildings. The cost of the first half of this latter program renders it undesirable if there are cheaper alternatives equally effective. As for the latter, municipal building of unsanitary areas, even in London and Liverpool where municipal housing is an accepted form of municipal business, has never proved a paying undertaking, chiefly for the following reasons:

Why English Examples Do Not Pay.

1. The original cost of the land and destruction of the insanitary houses is either prohibitive or places a too heavy initial charge upon the undertaking.
2. It has been found impossible to build municipal tenements on the same area to house healthfully as many persons as were dishoused by the slum clearance scheme.
3. The original dis-housed population tends to crowd with other families in small tenements while the area is being re-built, and does not return to the new buildings when completed, largely because the rents are inevitably higher than they were for the original accommodation.
4. It becomes profitable for a low class of speculators to buy unsanitary property and hold it unrepaired in the hope that the government will purchase it for a slum clearance scheme of this sort, paying them, as is usually the case, more for the land and buildings than they are really worth.

Municipal Housing Not Expedient in America.

Even if these arguments were not operative in American cities, municipal housing would for the present at least be undesirable, both because it is unnecessary (private capital can be relied upon to provide the necessary accommodations) and also because in our American cities we cannot guarantee the continued employment of expert men to operate a municipal housing

department. Municipal housing will not pay where long tenure of office cannot be guaranteed to efficient administrators, or where politics and slender appropriations can ruin the work of competent administrators.

SECTION III—ELIMINATION OF SLUMS BY TAXATION.

Taxation of Unearned Increment and Its Effect.

Another possible way of dealing with this area deserves very serious and extensive consideration, and that is the use of a system of heavy taxation of land values or of the unearned increment of land values. As these measures involve many other considerations besides those of housing, these other bearings of the subject should of course be studied with utmost care before the adoption of any scheme of land taxation. As a fiscal measure, however, the taxation of the increment of land values is conceded to be a peculiarly just form of taxation and a form calculated to bring large annual sums into the city treasury. There is no question that the community is chiefly responsible for increases in land values. It is just, therefore, for the community to appropriate such increment, especially since it can be done without placing any hardship upon industry. The only serious difficulties arise in determining a practical method of appropriation and assessment. The diverse schemes of New Zealand, Germany, England, and western Canada should therefore be studied, and the desirability of using one of these methods should be considered.

Taxation of Land Values and its Effect.

The application of a heavy tax on land values in the district under consideration would have a marked effect upon housing conditions and would be the cheapest way (assuming that a just method of appropriation was found and employed) in which the city could deal with this district. If the tax were taken off buildings within the block bounded by Shipman, Augusta, and Arlington Streets and Springfield Avenue, and the entire tax now levied on real estate was levied upon land only, the owners of this property would find it unprofitable to hold their land in its present wretched state. This is the only block among the five examined in which the assessed valuation of land exceeds the assessed value of buildings. In 1912, the land of this block was assessed at \$323,000 and buildings at \$175,000, whereas in the Prince Street block, land was assessed at only \$69,400 and build-

ings for \$254,600. If the entire tax of the city were levied upon land values the owners of property that is improved would generally find their taxes reduced, but the holders of vacant land or of land uneconomically developed, as it is in this area, would find their taxes increased, and would, in most cases, be confronted with the necessity of building or of selling to some individual who would be willing to build.

A wisely devised scheme of land taxation might reduce the general tax burden, increase municipal funds, and stimulate new building. Both the theory and practice of land taxation and of increment taxation therefore deserve immediate study by competent citizens with especial reference to local adoption, if it proves feasible, of some form of land taxation.

SECTION IV—OPENING UP SLUMS TO COMMERCE.

Augusta Street Area, Newark.

Another method of dealing with this district, is to open it up to commerce. This district is very close to both the commercial and civic centers of your city. The encroachment of business is indicated on Shipman Street, where a high-class garage is found next door to one of the worst tenement houses of this section. At present the streets are too narrow to be used for business purposes, which keeps business out of the centre of the district. (Augusta street is only 23 feet wide.) Its availability, however, is obvious. The entire character of the district would speedily change if South Orange Avenue were continued to meet Augusta Street at Shipman, if Augusta Street were widened through its entire length, graded, and (if it proves for other reasons desirable) joined to Maiden Lane on Washington.

Landers Alley Area, Newark.

I suggest also that your experts consider the advisability of extending Landers Alley to meet Springfield Avenue, and study also the feasibility of widening Landers Alley and Nicholson Street. If these street changes prove feasible, there is no question but that they would solve the housing problem in so far as this quarter is concerned, by shortly eliminating all of the unsanitary tenements from this district.

As these houses are replaced by commercial establishments, the occupants who are there because of poverty and not of preference, will be forced to move to quarters of the city where conditions are less likely to depress them into the ranks of the pauper and depraved. The immoral persons of this community

would be scattered; their movements should be watched by the police. Where there is ground for such treatment they should be sent to reformatories or hospitals, and under proper supervision after release should be given a fresh start at moral living.

SECTION V—STREET EXTENSION AND WIDENING.

From the housing point of view the remodelling of portions of the city already built may have a marked effect upon the dwelling conditions of the population in quarters so treated. In any district in which streets are widened or trees or grass strips are placed, there is impetus for the remodelling of old buildings along the improved street. In the absence of proper housing legislation such remodelling is likely to be purely superficial. A new brick face may be placed on an old and insanitary building: the dark room may remain. Still under any conditions, the occupants profit by an increase of light and air from the widened street by the purification of air where trees are placed, and by the increased beauty of their outlook.



In the city's large residential areas are a great many spots as attractive as this.



A garden in the rear of ——— Street. A well kept grass plot, neat walks and a flower border with a few well cared for trees render this house and garden peculiarly desirable for home life.

CHAPTER V.

THE HOUSING PROBLEM AND CITY PLANNING OF NEW AREAS

SECTION I—THE BEST TYPE OF HOUSING.

The Tenement.

The type of city plan which should be secured for your city must depend upon our answer to the question, what is the most desirable dwelling place, the tenement or the cottage? In the cities of the Northeastern States we have become accustomed to the tenement house and do not ordinarily question its social utility. There is scarcely a city in the country that is attempting in any well-considered way to eliminate the tenement house, yet there can be no question but that it is an undesirable place of residence for families with children. Even for the childless family, the most expensive apartment house as well as the cheapest tenement may constitute an undesirable environment because of the facility with which diseases may pass from one apartment to its neighbor through the common hall and through the mediation of vermin which pass easily from one suite to another. Where people live in apartments also there is concentration of population and thus much traffic in the neighboring streets which keeps the air full of dust and noise and thus renders apartment living unhealthful and unpleasant. The sounds from neighboring apartments frequently make rest and quiet impossible. True privacy and solitude, though very important to the growth of the moral individual, are difficult to obtain. For the family with children, the apartment is still less desirable. It becomes impossible for the mother of a family to choose her children's associates, to prevent her child from coming in contact with children or adults of unwholesome character who may reside within the same building. The mother cannot supervise the play of her child when outside of the apartment, and in general the atmosphere of the tenement or apartment house is one destined to create a race of adults that are unhealthful, puny, and socially, highly artificialized.

The Cottage.

In the cottage, however, it is possible to obtain all necessary privacy for true home life and personal development. The reduced dust of suburban communities and the larger penetration of sunlight makes cottage homes healthier living places for infants and growing children. The mother of the family, while at work in her kitchen can supervise the play and the associates of her child in the garden. The adults of the family, if so inclined, can profit in health at least and sometimes in economy by cultivating a garden outside of working hours. The children gain the advantage and education that comes from daily contact with the things of nature, especially through the garden. It is probable, therefore, that at least for families with children, the suburban home is preferable to the tenement.

SECTION II—MEANS OF PROMOTING SUBURBAN HOUSING.

General Statement.

It is, however, impossible to house the population of large cities in cottage homes unless such homes can be constructed to rent for a price (including both the cost of land and of the daily transit to and from work) no higher than the same family would pay for an equal number of rooms within the city tenement. Furthermore, families working within the city will not live in the suburbs if a too large proportion of their working day is consumed in transit to and from such residence. If any working member of such family is employed for ten or twelve hours a day in the heart of the city, the residence should not be placed more than one-half hour's ride from the place of business. To secure cottage homes therefore for the working classes of our cities, it is essential to have rapid and cheap transit, serving satisfactorily all of the possible outlying residential section, and it is equally necessary to have an abundance of cheap land and to make possible the cheap construction of cottage homes.

Transit and Radial Streets.

The housing conditions of a city are affected materially by the street plan. If suburbs are not accessible directly and cheaply from the centres of industry and commerce, population will tend to crowd in tenements near the heart of the city. Suburbs are rendered especially accessible by means of broad,

direct, radial streets, often termed the arteries of the city. Many American cities are built upon a gridiron plan of streets which renders certain suburbs peculiarly remote because accessible only by following the two legs of a triangle instead of following directly upon the hypotenuse. Newark, however, is especially favored in its original plan in that it has a number of radial streets leading from the centre of the city, of which the most important are Bloomfield Avenue, Springfield Avenue, and Clinton Avenue.

Co-operating With Surrounding Towns.

Newark is fortunate also in that it is surrounded on three sides by an abundance of desirable residential land. There is therefore plenty of room for expansion. Unfortunately this land at present is not (with the exception of Vailsburg) incorporated within the political boundaries of the city. It will be utterly impossible for Newark to house its working population in individual homes unless the city and all of its contiguous suburbs, within Essex County at least, can be treated as a single political unit in the preparation of street, district, block, and lot plans. The people in these contiguous communities very largely work in Newark. Considerable economy in the planning of city and suburbs as well as in the administration of all city institutions and of private business, could be effected if the suburbs could be incorporated in political Newark. If such incorporation is not immediately possible, it might still be feasible to establish a city plan commission for Metropolitan Newark or for the whole of Essex County, which could handle the entire problem of the city's growth as a unit. Such a program has been suggested for Metropolitan Boston and is partially operative today.

The difficulties of combining many small communities into a single co-operative group are so great that it would be best, if possible, to follow the other alternative and promote the early incorporation of all of the suburbs.

Methods of Discouraging Tenement Building.

One means of encouraging cottage construction is to discourage tenement building. The provisions already suggested (see pages 29, 30, 31 and 39) for incorporation in the State Tenement House Act or Local Building Code would have this effect in some degree, for if we require tenement houses over four stories high to be constructed fireproof throughout, as do Philadelphia, Pittsburgh, Scranton, St. Paul, and St. Louis, and require the three or four-story tenement to have brick exterior,

stairs, halls, and fire towers, investors in house property will construct houses less than three stories in height, because they will be comparatively cheaper in cost per unit of construction. The Massachusetts towns, Belmont, Arlington, and Winthrop, have eliminated the three-story tenement house for the future by requiring that every tenement house three stories in height shall be fireproof throughout. The cities above mentioned are all of them peculiarly free from high tenement houses.

Building and Loan Associations.

The most important institution in America for the promotion of home buildings is the Building and Loan Association. These associations are co-operative in character, formed and operated generally by men of modest means, artisans, mechanics, clerks, small shop keepers and teachers. Each contributes in regular small installments to the share capital (e. g. \$1.00 a month to a share of stock the ultimate value of which is \$200), and each may borrow from the common funds on the security of real estate or of shares of stock. Voting is democratic and equal. The movement has adopted as its motto "The American Home, the Safeguard of American Liberties," and has quite consistently loaned its funds to its members to facilitate home building or home purchase.

In 1911 there were 6,099 such associations recorded in the United States, with a membership of 2,333,000, assets of \$1,031,000,000, and annual receipts of \$708,185,000. New Jersey stands third among the States of the Union in membership in these associations, having 563 societies with 198,057 members (exceeded only by Pennsylvania and Ohio); 192 associations (over one-third of the total number for the State) are situated in Newark. The good fortune enjoyed by your city in being comparatively free from high tenements is probably chiefly traceable to the many building and loan associations which have placed their loans almost exclusively for the construction of one, two and three-family houses. Over \$30,000,000 is at present invested in such mortgage loans in Newark.

More building and loan associations are not needed in Newark at present. Improvement in their method will, however, facilitate the spread of the most desirable local types of housing. More general affiliation with the state and national leagues is essential. Under the able presidency of Mr. Chas. O'Connor Hennessey, the United States League is studying this year the ways in which local associations can promote housing reform. Only a high degree of organization can make the adoption of

improved methods speedy and general. While awaiting the specific report of the National League the following suggestions should be made:

That local associations be made conscious of the existence of a housing problem.

That, as a result, they may be more considerate of borrowers (who constitute only one-fifth to one-fourth of their membership) instead of considering chiefly, as at present, the means of increasing the profit to lending members.

That the "gross premium" plan which is widely prevalent be so modified as to render the distribution of burdens and of profits equitably or be abandoned.

That means of reducing interest rates—which are high in the associations of Newark (usually 6%)—and of abolishing premiums of all sorts be seriously studied.

That preference in the granting of loans be given builders of single-family houses; that two-family houses have second preference and three-family houses be loaned upon only after bids for loans for home acquisition are all filled.

SECTION III—THE ZONE SYSTEM.

Tenements in Residential Districts.

The measures above indicated would tend to eliminate from your city all new construction of high tenement houses except for apartment houses of the well-to-do classes. It would not, however, prevent any man from constructing such apartment house on any lot in the city or suburb which he might chance to own. It would still be possible for a man to place a high apartment house in the midst of a block of private residences, as is now being done in the Roseville section of your city, shutting out light from his neighbors' homes, marring the beauty of their outlook with the ugly back of his building and bringing into that street a class of population of different tastes and perhaps of a type from which neighboring parents would wish to protect their children.

Introduction of Tenements Upon Consent of Neighbors.

The city of Calgary, in Alberta, attempts to meet this difficulty by providing in its local building code that no owner shall build an apartment house within any city block unless two-thirds of the other owners in the block give their assent. This provision is, however, inequitable in that it does not give all the

persons who are interested in the erection of such apartment house an opportunity to vote. The owner of the property across the street would be equally affected by the building of such apartment house, so also in less degree would the passerby whose outlook may be marred by its erection.

German Zone System.

To protect a suburban community from the intrusion of undesirable building types, it might be desirable here, as in German cities, to establish the zone system of building. The essential feature of the zone system is that a city is divided into districts in which building types are permanently fixed. In the heart of the city the highest buildings may be erected (six stories, in the case of Vienna); in the next district, near the centre of the city, buildings may be erected one story less high and perhaps covering a smaller proportion of their lot. In the third district will be found again a reduced height and a reduced percentage of lot area to be covered. In outlying districts, contiguous building tenement construction or building to the lot line is not permitted, and frequently only 40 per cent of a lot may be covered.

The Existing Building Districts of Newark.

Examination of the present development of your city shows a great variety in building types and a large number of districts of each type as well as a large number of mixed districts. For example, the three or four-story tenement house and the single-family house converted to use of two or more families, prevail in Wards 4 and 5, in those portions of Ward 12 which lie nearest to the centre of the city, and may be found quite generally within the fire limits. There are several sections devoted to the estates of the well-to-do quite sharply separated from the homes of their neighbors of lesser means. Older houses of this type are on and near High Street, in Ward 7, for example, and in parts of Wards 8, 9, 11, and 16. The brick tenement house of three to five stories is frequent within the fire limits on the main arteries of the city, but except for the Prince Street district and the Italian district of Garside Street and vicinity, new brick tenements are, with very few exceptions, placed within one block of the main arteries of the city. There is however a new growth of such brick tenement houses on the northwest side of Eastside Park: between Oliver Street, Warwick Street, Jefferson Street and Eastside Park, 23 such tenements have been built within the last eight years. Many more have been re-erected recently on the

residential streets between Lafayette and Market. Brick tenements are increasing in numbers, but it is evident that they can be restricted very easily to specific districts and that such restriction will create no hardships. There are only four brick tenement houses in Vailsburg, all of which were constructed on the main street. The exclusion of brick tenements from this quarter would not harm either the land owners or other citizens.

The Wooden Three-Decker.

The predominant form of tenement construction in Essex County and especially in Newark is the three-story frame tenement house. These also tend to congregate in specific districts. Old-style three-deckers, lacking much of the modern equipment, will be found within the fire limits, especially in districts of the character of Wards 5, 7, 12 and 15. Today such tenement houses are not being built within the fire limits, due to legal restriction (the map shows one or two exceptions on Commerce, Camfield and Cedar Streets, granted either before present limits were defined or on appeal). Only 25 new frame tenements have been built in Wards 5 and 12 since 1904 between Hamburg Place and the river, but 24 have been built within one block of Eastside Park within the same period, and 25 more between Elm Road and Hamburg Place. A small zone of three-story buildings is forming naturally at this point. The chief zone of the three-decker follows Bergen Street through Wards 16, 14 and 6. About one-third of all the new frame tenement houses in the city are within three blocks of Bergen Street. Within ten blocks in each direction from the intersection of Sixteenth Avenue and Tenth Street lie approximately 80% of all the new frame tenements of the city. (This district includes the lower end of 13th Ward, 14th and 16th Wards and small portions of Wards 6 and 9.) This is the major zone of the three-decker. Only 56 frame tenements have been constructed in Vailsburg since 1904, but of these 36 were erected within the past year (photos. Nos. 20 and 21). These are mostly on Brookdale Avenue and Norwood Street. It is not necessary to inflict the three-decker upon Vailsburg; the further spread of this type of house in that section should be checked. Similarly the three-decker is not intruding in Ward 8. There have been until recently comparatively few built north and east of Orange Street; yet the figures for 1912 show that plans were filed within eight months for nine on Mount Prospect Avenue and eleven on Chester Avenue between Erie Place and Hinsdale Place. A photograph (No. 18) shows how the erection of two such buildings on Mount Prospect Avenue has marred the beauty of what

has been your most beautiful residence street. The three-decker, if permitted to enter this district, will spoil its beauty, its safety, and will hurt land values. Their erection in this quarter should be prohibited.

The Two-Family House.

The two-family house has been described in the report of the British Board of Trade on Working Class Rents, Housing, and Retail Prices in American Cities as the "best type" of dwelling for the working class in Newark in that it has all of the advantages of the three-family house and yet has more privacy and better upkeep. There is a great deal to be said in favor of the two-flat house, which fortunately is to be found in considerable numbers in the outer wards of your city. In the two-flat house, the disadvantages of the larger tenement are reduced to the minimum. Most of the advantages of the cottage home, save that of ownership (for one family at least) and of garden are to be had in the two-flat house. It is undoubtedly a highly desirable form of housing for a large class of the population. If its safety from conflagration were increased by the use of incombustible shingles in every instance, if its beauty were enhanced by building the third half-story over the ugly truncated ell (photo. Nos. 10 and 20), if such houses were always at least 10 feet from their neighbors (preferably at a larger distance), if they were built less narrow than they now are, with two rooms fairly square in shape and abreast, such houses would make very desirable homes. Improvement in the architectural design of the two-family house might be promoted by the circulation through either private or public bodies of free plans of more pleasing types built in other cities (much as the Worcester Savings Bank has distributed within its city free plans of private houses in the hope of replacing the three-decker). A satisfactory type of house, however, is not possible until the prevailing shape of lot is changed (see page 68). The two-family house is to be found especially in Wards 8, 9, 13 and 16 and in Vailsburg. Both the two-flat house and the three-decker are to be found in considerable quantity in the other suburbs of Newark. But few large districts, fortunately, have been formed so it would be possible with the abundance of vacant land which characterizes these suburbs to have the metropolitan district zoned in such a way as to separate these houses from the single family house which we wish to encourage.

The Application of the Zone System to Newark.

A zone system on the German principle could not be applied in political Newark as it stands today. In a very few years all



House at _____ Street. Acquired from its builder for less than \$1,500 or the equivalent of a rent of \$11.00 a month. The garden was peculiarly beautiful late in September, when this photograph was taken. This shows a possible alternative for the tenement house, a home with beauty as well as privacy for working class families.

the vacant land in the outlying wards will be well covered with buildings, and unless new suburbs are incorporated, the city must grow up to tenement houses. Already the number and percentage of tenement houses is large and increasing. This tendency cannot be restrained unless more land can be secured for urban expansion. If, however, a plan may be drawn for Newark and its suburbs, a zone system would, I think, be both practicable and desirable.

The constitutionality of the zone system has been tested in Boston, which has two zones, one for buildings 125 feet high maximum, and the other with a maximum of 80 feet. A zone system as applied to Newark should, however, restrict tenement houses to a district corresponding very roughly with the fire limits of the present city, permitting apartment houses also perhaps upon certain radial avenues of the city and at sub-centres, but probably in no other quarters. If tenement houses were permitted upon the radial streets, it might prove desirable to permit them to be placed upon all of the lots of such blocks. Otherwise the dwellers in smaller houses of the immediate vicinity would face the ugly backs of the apartment row on the avenue.* It is probably better that the tenement zone should not follow the present fire limits of the city and the radial avenues at all parts, but the exact limits of the tenement zone can be determined only after a most rigid and painstaking examination of the present tenement quarters of the city as indicated in the residential map, of the directions of growth of the tenement district, as indicated in the map of new law brick tenements for the last eight years and with reference also to the general plan for the city. Their determination must also involve a thorough investigation of the methods and experience of German cities in the establishment of building zones. If, however, the entire metropolitan district of Newark were planned by the same authority, it would be possible to restrict the four or more storied tenement very narrowly in the district roughly defined, to restrict the three-story tenement house largely to the districts in which they are now found, to restrict the two-family house equally to specified quarters of the city in which it is now most largely found, and probably also to specific outlying suburban districts, and yet leave the major portion of Vailsburg and the contiguous suburbs of Newark for development in single or multiple construction of one-family dwellings. No zone system for the residential districts can be established with success, however, unless the factory quarter

*An alternative suggestion is the establishment of competent architectural censorship of apartment houses on radial streets. Brookline and Cambridge, two of Boston's suburbs, have developed several artistic and unobjectionable types of apartment houses on radial streets through residence quarters.

is determined, unless that quarter is rendered accessible by the provision of proper transit facilities from all parts of the city, and unless the suburbs are opened up and controlled in their development by the city,

The Factory Zone.

A zone system will inevitably involve the districting of factories if the welfare of the community is to be conserved. Where factories and tenements are mingled, the gases and smoke may render living conditions unhealthful or unpleasant. German cities very generally restrict their factories to quarters of the city in which the available transportation facilities are of the best, and from which the prevailing winds will carry away the smoke, dust, gases and noise. Newark is fortunate in having a very large district especially adapted to factory use, where land is cheap, where the best transportation facilities are possible, and where the prevailing winds will ordinarily carry the smoke and gases away from residence quarters. This district is of course the marshland lying to the southeast of the city. An exceptional opportunity is here offered for the development of a factory zone of the most efficient order, and from such zone all dwellings may be permanently excluded. The present factories and workshops in the heart of the city need not be transferred to such a zone unless they constitute a public nuisance. It will probably be desirable also to permit workshops of specified character along the radials of the tenement zone of your city; many of the clothing trades, for example, might be permitted within the tenement zone, or mixed zones (for factories and tenements) might be established within the tenement zone.

If the marsh district is to have a large industrial development, it will be necessary to determine as early as possible what streets shall be enlarged and used as radials to carry the working population from their place of work to the suburbs lying to the west (Irvington, etc.). Peddie Street might be made to serve for this purpose; also Alpine Street extended, or Chestnut Street with Clinton Avenue, South Street with Waverly Avenue, Hamburg Place with Ferry Street. A subway underneath and extended to the north might render the district accessible to residential Bloomfield and Belleville.

SECTION IV—MOVING THE FACTORIES OUT.

The Advantages.

One other adjustment of the factory and cottage home is ordinarily termed industrial decentralization. In England espe-

cially housing reformers have agitated for the removal of factories from cities into the open country, where land is cheap and abundant, where transportation facilities can very frequently be rendered of the best, and where each worker can live in a cottage home.

The Industrial Community.

Such industrial communities may be established co-operatively, as in the case of the British "Garden City," or may be established by the owners of factories, as is the current American practice, the houses in this case being erected by the manufacturer either to rent or sell on easy terms to his employees (e. g., The Draper Company, Hopedale, Mass., The Plymouth Cordage Company, North Plymouth, Mass., the Ludlow Manufacturing Associates, Springfield, Mass.), or else the employer may buy the land in quantity, divide it into small lots and sell on easy installments to his employees, who may build homes of their own design.

Possible Only with Incorporation of Suburbs.

It is obvious that industrial decentralization is impossible in the political Newark of today on any large scale, though the few factories on the Belleville line illustrate the possibility of such decentralization on a small scale. Preferably where industries are decentralized they should still congregate in small sub-centers, so arranged that they shall not reduce the amenity of living conditions in their vicinity, but may still make it possible for the worker to live in a cottage on cheap land near his work. If Newark should incorporate its suburbs, it might be desirable to establish industrial sub-centers of this sort on the outskirts of some of the suburbs, making possible the cottage home and proximity to work for the employee and the advantage of efficient help and the trade and social advantages of the city for the employer. The possibility of such decentralization and its advantages should be considered by your local Board of Trade in case of the incorporation of suburbs.

SECTION V—REDUCING THE COST OF HOUSE LOTS.

The Cost of Suburban Land.

Cottage construction for working men is impossible at present wage rates unless land can be procured which is both accessible to work and cheap. Much of the suburban land in Ameri-

can cities is being held vacant today by speculators in the hope of reaping a large increase in land values. Accessible land is not easy to procure in small parcels. There are several ways, however, in which it may be rendered more available.

Municipal Land Ownership.

German cities, for example, quite generally buy up their suburbs and then sell the land in small parcels under heavy restrictions as to its future use or transfer, or else lease this land to builders on long term leases. By this means suburban land prices can be kept low, the city receiving the unearned increment of its land in the form of enjoyment of its proper usage as homes for working people, instead of receiving it in the form of taxes or rents. The city of Ulm, Germany, between the years 1891 and 1909, thus purchased 1,208 acres of land for \$1,390,000 and sold 404 acres under restrictions for \$1,633,000, thus reaping from its transaction 804 acres of land and \$234,000. As a result of this method Ulm has peculiarly available cottage homes for its workmen and yet enjoys the lowest tax rate in Wurtemberg.

Co-operative Development of Land.

Land prices may be similarly restrained or communities can democratically share the advantage accruing from the unearned increment of land by means of co-operative development. The Co-partnership Tenant societies formed by artisans, mechanics and clerks in some twenty British cities have thus bought patches of suburban land from ten to three hundred acres in size at a reduced cost per unit: they have developed such land co-operatively at reduced cost per unit for architect's services, the laying of streets, plumbing, sewerage, etc., and they have built their houses co-operatively, purchasing materials for fifty or more houses at once at materially reduced costs. Each tenant pays rent for his cottage home to the Co-partnership Tenant Society to which he and his neighbors belong and receives his profits in the form of dividends on rents, paid not in cash but in shares of stock in the community. The unearned increment of the land is the common property of the co-operating members and enhances their profits. The Harborne Co-partnership Society in its garden suburb on the outskirts of Birmingham, England, was formed by workingmen who today pay rents for these cottage homes at rates no higher than they paid previously for unsanitary slum tenements in the city. Yet this society is already able to pay 8% dividends on rents in addition to the regular 5% interest on invested capital. The British workingmen have, how-



Houses in Vailsburg. A peculiarly attractive residential street. Well-paved, well-treed and with well-kept estates. The houses are built on 35 ft. lots, which are wide enough to permit rooms of ample size to be built abreast and yet leave adequate space between houses. On 25 ft. lots rooms are elongated, cramped, more difficult to heat and houses must be crowded too closely together to have adequate light and safety from fire.

ever, had more experience in co-operative methods than have the American workingmen. This method of cheapening and facilitating suburban development would not be applicable in Newark without an intermediate period of careful study of co-operative methods by the workingmen who plan the association, and preferably should not be tried until they have had some experience in some form of co-operative practice. Garden suburbs of this character in England and in Germany have been facilitated by cheap loans of capital from the governments of these countries. If capital could be obtained from some source at 4% interest or less, and if the experiment had the backing of influential citizens it would be much easier to make it a success.

The Land Tax.

A third means of reducing the cost of land per cottage would be by use of the land tax already described on page 52. If the tax were taken off improvements and placed exclusively upon the land, the vacant land now held in the suburbs by speculators would be largely placed upon the market or built upon. It is probable that land under such conditions would be more readily available to modest purchasers in the suburbs of our cities, and in so far would make suburban housing possible.

Reducing the Cost of Residential Streets.

At present residential streets in suburban Newark are largely unnecessarily expensive in construction. In general it must be said that your radial streets are if anything too narrow, but that residential streets throughout the city are rendered costly through unnecessary width and through expensive provision of curbs and sidewalks. Some residence streets must be used for a fairly large local traffic. Others are by their very nature and direction precluded from such use. A careful study of this problem will indicate that in certain suburban residential quarters the width of streets might easily be reduced to the provision of a 22-foot or even a 16-foot roadway flanked by grass strips. By establishing a building line of ten or more feet on each side of such roadway, it would be then possible for the city to widen its streets without serious expense if that should ever prove necessary. The provision of sidewalks on both sides of the street is also not invariably necessary in suburban quarters of this character where a street is purely local. Under such conditions, if the street is developed only to such degree as to render it adequate for its local service, the cost of street construction will constitute a much less serious burden upon the abutting home owners.

SECTION VI—REDUCING COST OF HOUSES.

Reducing the Cost of Cottage Construction.

Suburban development will be encouraged not only by keeping low the price of land and restricting the use, but also by any reduction that can be made in the cost of constructing cottage homes for working men. In general it is possible to construct tenement houses which shall be cheaper per unit of accommodation than cottage homes. This would probably not be true if we required tenement houses to be fireproof. It is, however, advisable for citizens who are aware of the urgency of their local housing problems to experiment in the construction of detached and of multiple cottages. The best ability of architects in America has been turned to monumental work, but the important social problem of designing cheap cottages has been almost overlooked by them. In England the attention of the best architects has been turned to this problem by the holding of competitions with prizes for the best cottage constructed for a specified sum (£175 in the case of the first cheap cottages exhibition, Garden City, 1905). The purchase of the houses constructed may be guaranteed by the promoting body. It would be desirable to interest more of the best architects in America in this problem, for by competition new arrangements of houses and new materials for construction will be brought to public attention. Such a competition might be held by a municipality (as, for example, one was held at Sheffield, England, in 1907), but such competition could be held with equal satisfaction by some private organization (as, for example, the Rochester and the Albany, N. Y., Chamber of Commerce competitions). It is in experiments of this sort that private organizations can do their best work in meeting the problem of promoting suburban housing. The cost of cottage construction can be reduced also by large scale building; buying and developing several acres of land at a time. This may be done by philanthropic associations (e. g., "Homewood Community," built by the City and Suburban Homes Co. of New York), by employers of labor, by commercial building companies or by co-operative association of tenants.

SECTION VII—LOT UNITS AND HOUSING.

Existing Size and Shape of Lots in Newark.

At present the Board of Public Works of this city discourages in the suburbs as well as in the city the use of winding streets and irregular lots. The only winding streets in Newark are Hinsdale Place, Renner Avenue and Homestead Park, and

these do not curve for more than a block or two of their length. There is no doubt that there are real advantages in having streets straight and lots of uniform shape. There are few "waste corners" on such lots. Their value is easily ascertained. They are easily described and recorded.

The prevailing lot in Newark is approximately 25 feet by 100, though its width may vary from 15 feet to 30 and its depth from 75 feet to 120. Most of the lots of the city are of dimensions contained within these limits. There are exceptions in the form of very deep residential lots, as, for example, at Nos. — to — Orchard Street, there are very broad lots on Clinton Hill between Madison Avenue, South Thirteenth Street, Runyon Street and Seymour Avenue; there are huge lots also on lower High Street, from 40 to 100 feet wide and often 200 feet deep. But in Wards 13, 14, 16 and 9, lots are very generally of approximately 25 feet in width by 100 feet in depth, being varied only when the diagonals of the city cut across the residential gridiron streets.

Types Used in Recent Subdivisions in Newark.

The land development companies of the city have apparently accepted this shape of lot and consistently employ it in their development schemes; for example, Newark Park on Weequahic Avenue, Clinton Park south tract, and East Orange Terrace on South Orange Avenue all make use of a lot 20 feet by 100, and comprise altogether about 800 lots of these dimensions. The lot 25 feet by 100 has been employed on Clinton Heights, parts of the Weequahic Park tract, on Arsdale Terrace, and East Orange Terrace on South Orange Avenue. Double lots, 50 feet by 100, have been used on the Weequahic Park tract for expensive single-family residences. In East Orange similarly this same type of lot is used, though fortunately East Orange is not completely abandoned to the gridiron plan, having a few winding streets and irregular lots.

Disadvantages of Uniform Type.

There are several serious disadvantages in having lots of uniform shape. In the first place a popular prejudice is created for the deep and narrow lot which is not easily dislodged, and the poor man who wishes to build a cottage home is socially constrained to purchase a lot 100 feet deep whether he needs so much land or not. It is perhaps the safest thing for a city to have standard lots at least in the heart of the city until the

science of lot distribution and usage is developed. It is not easy to make definitive prescriptions for the employment of lots of any other specific size which would be more satisfactory for all purposes. But the lack of elasticity in present lot shapes and sizes is fraught with serious consequences. The 25 by 100 foot lot cannot be used economically for workingmen's cottages. It is wasteful of land at the rear (the American workingman will not ordinarily start a garden as will the English or Italian). It is parsimonious of land at the sides of houses, especially if built in two-flat style. It becomes impossible to construct two-flat houses on lots of this shape which will not be too near to the lot line and thus to neighboring houses. The maintenance of the 25 by 100 foot lot is likely to make Newark a city of tenements unless the undeveloped land of new sections, including, of course, all of Newark's contiguous suburbs, can be more economically plotted.

Recommended Suburban Street and Lot Planning.

If the arterial streets of a city are broad and sufficiently straight, and there are occasional broad cross streets within the residential zones, it should be possible to plan much of the remaining residential land with narrow dirt streets for local service purely, often perhaps with one sidewalk or none, grass strips and trees at the sides and a building line for houses on abutting lots. These streets might wind, which would enhance their beauty, and if on a hillside, ought to wind in some accordance with the contour lines of the hill. In such quarters lots of varying shapes and sizes would be possible.

Recommended Type Near Factories.

Near factory quarters, where land values are not yet prohibitive, the Philadelphia type of housing might be promoted by the establishment of lots even down to 14 to 16 feet in width and perhaps 40 feet in depth to be built up with four-room or six-room cottages, two stories in height with brick dividing walls on the lot line. Houses of this type could be constructed available even for the families of day laborers, as the experience of Philadelphia has proved. Preferably, if this type of house is to be used, builders should be provided by some competent authority with standard plans showing types of construction that are cheapest in design and at the same time healthful and varied in exterior. Multiple cottages of this type can be constructed to rent or to sell. Streets may be narrow without dark-



Shows how attractive are some of the newer parts of the city in which homes like these are going up by the hundreds.



Near the Belleville line. The ungraded street and neighboring land is rotten with garbage and refuse. The wretched houses are damp. Several of these shacks lack side windows, a condition seriously reducing the amount of light and ventilation obtainable, thereby rendering rooms a harboring place for disease germs. The children of this quarter strikingly show the effect of their environment. At the time the photograph was taken the children were more rude and unmanageable than in any other part of the city.

ening rooms, but provision should be made for grass strips and trees on all streets of this character, relieving their monotony of type, and improving the air for the semi-crowded occupants.

Suburban Lots Wider and Shallower.

In Vailsburg and in the outlying portions of Newark's contiguous suburbs, both straight and winding streets may be provided, and in specific quarters lots narrow or wide, shallow or deep, may be accepted according to the prospective use of the quarter. In general, however, the narrow lot should be avoided in such suburbs, and the permission to plot deep lots might be granted if the city guarded the right to push a minor street through the middle of the block in the future. Both one and two-family houses could be constructed more economically and to greater social advantage on lots from 30 to 35 feet in width and 60 to 70 feet in depth than they can now on the 25 by 100 foot lot. On the wider lot, as specified, houses can be constructed with square floor plan, two rooms abreast and two or three rooms deep, reducing somewhat the cost of construction, the cost of heating, and the cost of furnishing such homes. Furthermore, the lot 35 feet by 60 in dimensions uses 400 square feet less of land than the lot of 100 by 25 feet. On it a house may be built with two rooms of ordinary size abreast and yet leave 5 feet on the side to each lot line. The house may be built two rooms deep and leave a 10 foot lawn in front (insured by municipal provision for a building line) and a 25 foot yard in the rear, which may be encroached upon by a third room in the depth of the house or by a piazza, or may be used as a garden. The only serious disadvantage of this lot plan lies in that it provides for an increased street frontage, and thereby a larger cost to the owner for road construction, etc. But if street costs in residence sections are reduced by the means above specified (see page 67), there will unquestionably be a net gain to society from the use of this method.

How to Make the Above Pay.

Irregular lots on winding streets can be rendered economical and exceedingly beautiful if developed co-operatively in the manner specified on page 66. The provision of playgrounds in the middle of the block or of allotment gardens to be leased by such tenants as desire gardens will add materially to the beauty, healthfulness and naturalness of such communities. The British co-partnership garden suburbs are so planned, and yet are able to house workmen at current rates. This general sub-

ject is ably treated in articles by F. C. Howe and by Grosvenor Atterbury in the July, 1912, number of Scribner's Magazine. (See also *The Width and Arrangement of Streets* by Charles Mulford Robinson and the reports and plans of British Garden Suburbs).

CONCLUSION

SECTION I—MUNICIPAL CONTROL OF HOUSING AND CITY PLANNING.

Need of a Permanent City Plan Commission.

If your city is to determine its housing development, it is essential that there be a municipal commission empowered to establish the building zones of the city, to pass upon and if necessary reject plans of land companies for estate development, to determine also the direction, width, paving and planting of new streets, with power to inaugurate schemes and enforce its decisions in so far as they affect vitally the welfare of the community. There should be a permanent city plan commission for metropolitan Newark, even if the suburbs of the city are not all, as they should be, incorporated within the political city.

Example of Europe.

There is much European precedent for the establishment of such commissions with power. German cities are so provided. English cities under the town planning act of 1909 may secure power to regulate the method and extent of development of land likely to be used for building purposes within, or in the neighborhood of, their area (Section 54). They also have power to limit the number of buildings which may be erected per acre and the height and character of those buildings.

American Examples.

In America, city planning powers of this type are already being given by provincial governments to the cities of Canada. In Ontario, for example, local town planning commissions have power to pass on all lot distribution of towns of 50,000 inhabitants or more, and cities may plan for the area within five miles of their limits. No lots may be sold until such plans are approved. The value of this power is reduced in so far as the promotion of workingmen's suburban homes is concerned by the requirement that all streets shall be at least 60 feet wide. The provinces of western Canada have given quite similar power to their cities. In the States, like powers have already been granted to cities in Pennsylvania and Wisconsin. And that power under

the Wisconsin law regarding the platting of land near cities, adopted in 1909, extends to all land within one and one-half miles of the limits of such city.

SECTION II—CO-OPERATION OF PRIVATE BODIES

Existing Co-operation.

Private action in the improving of housing conditions of Newark has been limited very largely to the occasional reporting of unsanitary conditions by charitable agencies, the recording of housing conditions of tuberculous persons in a somewhat general way, by the Anti-Tuberculosis Association, the intensive investigation of housing conditions just begun by the Public Welfare Committee, and to the work of visiting nurses and visiting housekeepers in educating tenants, these persons being employed by the Associated Charities, Visiting Nurse Association and Anti-Tuberculosis Association. There are a few agencies also designed to encourage the beautification of tenements through distributing flowers, window boxes, seeds, etc., in tenement house sections.

Employers of labor have not made wide use of their opportunity to construct sanitary homes for their employees.

The Board of Trade maintains several committees interested in matters bearing upon the housing problem, especially its committees on public health, taxation, and fire hazard. Of these, the first and last, at least, have contributed reports which have helped to improve the local housing situation.

Example of Cleveland and Boston.

In some cities, however, boards of trade have taken much more active interest in housing problems and have been the most progressive and enlightened agents for housing reform. The Cleveland Chamber of Commerce, through its committee on housing conditions, established a special tenement house division in the local health department, with a highly trained supervisor, Miss Chadsey, 20 sanitary patrolmen, and record systems of high order. It is now engaged in promoting a State Tenement House act, which if passed will be one of the best of its kind in the country. The Boston Chamber of Commerce has conducted some very interesting investigations in methods of construction of tenement houses and in fireproofing, and has published tables on the costs of erection and maintenance of houses of similar design, built of various materials.

What Newark Can Do.

Newark, however, is in especial need of some permanent housing association or committee which will create and represent the enlightened public opinion of the community. The local boards of health and building will prove responsive to the suggestions of such a body. Such a private association should study local conditions, suggest changes in laws where necessary, supervise public departments and officials, experiment in methods of cheap construction, and create a strong public opinion for the improvement of the housing conditions of all citizens. The Board of Trade and the Public Welfare Committee have between them the necessary qualifications for such action—business sagacity and balance on the one hand, insight into social needs and methods on the other. Through co-operative action of these agencies a live sane public opinion could be created and important results achieved.

NOTE:—No names or street numbers are given in this report, but all data from which this report was written is on file at the City Plan Commission rooms.

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The City Plan Commission

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Newark, New Jersey

JACOB HAUSSLING
MAYOR

Population (Census 1910)	- - -	347,469
Total Taxable Valuations Year 1912	-	\$383,864,112

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ROBERT L. ROSS, Secretary